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**UNITED STATES PACIFIC FLEET  
AND PACIFIC OCEAN AREAS**



**JAPANESE PROJECTILES  
VOLUME I**

**CINCPAC - CINCPOA  
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Table of Contents

VOLUME ONE	
INTRODUCTION . . . . .	1
GLOSSARY . . . . .	2-5
CASE MARKINGS . . . . .	6
CASE LENGTHS . . . . .	7-8
EQUIPMENT CLASSES . . . . .	8
FILLERS . . . . .	9
HAND THROWN PROJECTILES . . . . .	10-35
PROJECTILES FROM HAND THROWN THROUGH 400 MM . . . . .	36-305
6.5 MM . . . . .	36-40
7.7 MM . . . . .	41-55
7.9 MM . . . . .	56-62
8 MM . . . . .	63
9 MM . . . . .	64
12.7 MM . . . . .	65-67
13 MM . . . . .	68-78
20 MM . . . . .	79-106
25 MM . . . . .	107-114
30 MM . . . . .	115-121
37 MM . . . . .	122-130
40 MM . . . . .	131
47 MM . . . . .	132
50 MM . . . . .	133-148
57 MM . . . . .	149-151
70 MM . . . . .	152-160
75 MM . . . . .	161-210
VOLUME TWO	
81 MM . . . . .	211
88 MM . . . . .	212
90 MM . . . . .	213-222
105 MM . . . . .	223-254
120 MM . . . . .	255-262
150 MM . . . . .	263-296
200 MM . . . . .	297
240 MM . . . . .	298-299
280 MM . . . . .	299-300
300 MM . . . . .	301-305
400 MM . . . . .	305
NAVAL PROJECTILES . . . . .	306-420
50 MM . . . . .	307-310
60 MM . . . . .	311-312
80 MM . . . . .	313-329
100 MM . . . . .	330-332
120 MM . . . . .	333-349
127 MM . . . . .	350-357
140 MM . . . . .	358-367
150 MM . . . . .	368-384
155 MM . . . . .	385-386
200 MM . . . . .	387-401
250 MM . . . . .	402-403
360 MM . . . . .	404-412
400 MM . . . . .	413-420
ADDITIONAL PROJECTILES . . . . .	421-426

# JAPANESE PROJECTILES

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## *Introduction*

**T**he information in this publication comes wholly from Japanese documents. As a result of the wide range of sources--official documents to lecture notes in professional notebooks--inconsistencies appear and have been eliminated only where the data has been clearly wrong. For example, in several cases there are listings of more than one projectile with the same designation for the same gun. It is possible that such discrepancies are due to errors in the documents and will be resolved on the receipt of further information. No attempt has been made to assign an intelligence value to the sources

**A**lthough several guns may be listed for a single projectile, the complete round may not be interchangeable due to the differing case lengths required for the various guns. A partial list of case lengths is included in the introduction. All dimensions are expressed in the metric system.

**A**s further documentary information is received, supplementary material on hitherto unreported projectiles or additional data on the present list of projectiles will be published.

# *Glossary*

演習彈	Practice Shell
代用彈	Substitute Shell (TN: used for practice)
狹窄實包	Snub-nosed Practice Cartridge
時限演習彈	Time Practice Shell
目標彈	Target Shell
空包	Blank Cartridge
發煙彈	Smoke Shell
曳煙彈	Smoke Tracer Shell
小發煙筒	Small Smoke Candle
大發煙筒	Large Smoke Candle
淺煙發煙筒	Thin Smoke Smoke Candle
水上發煙筒	Floating Smoke Candle
信號發煙筒	Signal Smoke Candle
地上信號彈	Ground Signal Shell
黃龍	Yellow Dragon
黑龍	Black Dragon



赤龍	Red Dragon
綠龍	Green Dragon
白吊星	White Parachute Star
赤一流星	Red Single Shooting Star
赤二流星	Red Double Shooting Star
赤三流星	Red Triple Shooting Star
赤旗	Red Flag
國旗	National Flag
星彈	Star Shell
照明彈	Illuminating Shell
發射照明彈	Self-projected Illuminating Candle
燒夷彈	Incendiary Shell
燒霰彈	Incendiary Shrapnel Shell
榴霰彈	Shrapnel Shell
環層彈	Fragmentation Shell
曳光彈	Tracer Shell
曳跟彈	Tracer Shell
曳光榴彈	High Explosive Tracer Shell



曳光自爆榴彈	High Explosive Shell w/Self Destroying Tracer
曳光徹甲彈	Armor Piercing Tracer Shell
徹甲彈	Armor Piercing Shell
破甲彈	Armor Piercing Shell
破帽徹甲彈	Capped Armor Piercing Shell
實包	Ball
普通彈	Ball
通常彈	Common or High Explosive Shell
榴彈	High Explosive Shell
重榴彈	Heavy High Explosive Shell
破甲榴彈	Armor Piercing High Explosive Shell
鑄鐵破甲榴彈	Cast Iron Armor Piercing High Explosive Shell
堅鐵彈	Chilled Steel Shell
鋼性銃彈	Semi-steel Shell
光銳彈	Long-pointed Shell
高射光銳彈	Long-pointed AA Shell
破鋼彈	Steel Jacketed Shell



除銅彈	Cupro-Nickel Jacketed Shell
有孔彈	Perforated Shell
タ 彈	Hollow Charge Grenade or Shell
手榴彈	Hand Grenade
曳火手榴彈	Hand Grenade w/Time Fuze
柄付手榴彈	Stick Grenade



# Case Markings

20 mm

- HO-5 Automatic Cannon (航 輕) (vertically in purple)
- Type 97 Automatic Gun (九 七 自) (vertically)
- Type 94 Flexible Automatic Cannon (九 四 旋 機) (vertically in purple)
- Type 98 AA/AT Automatic Cannon (九 八 機) (vertically)

37 mm

- Type 94 37 mm Gun (九 四 砲) (vertically)
- Type 94 37 mm Tank Gun (九 四 戰) (vertically)
- 11th Year Type 37 mm Gun (十 一 平 步) (vertically)

70 mm

- Type 92 70 mm Inf Gun (步 二 九) (TN: This may be followed by a character in parenthesis to distinguish A ( 甲 ) from B ( 乙 ) projectiles.

75 mm

- Type 94 Mtn Gun (九 四 山) (vertically)
- Type 94 7 cm Tank Gun (戰 四 九)

TN: Cases for any one of the four guns which follow are marked with all characters below:

Type 38 Field Gun	九	改	四	三
Type 41 Cavalry Gun		造		
Improved Type 38 Field Gun	五	三	一	八
Type 95 Field Gun		八		
	野	野	騎	野



## *Case Lengths*

### 7.7 mm

Type 99 Rifle	58.0 mm
Type 99 LMG	58.0 mm

### 7.9 mm

Type 98 Fixed MG	57.0 mm
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### 12.7 mm

12.7 mm Aircraft MG (Browning Type)	81.0 mm
-------------------------------------	---------

### 20 mm

Type 97 Automatic Gun	125.0 mm
Type 99 Mk. 1 Automatic Cannon	71.0 mm
Type 99 Mk. 2 Automatic Cannon	101.0 mm
HO-5 Automatic Cannon	94.0 mm

### 30 mm

Type 2 Automatic Cannon, Model 1	92.0 mm
----------------------------------	---------

### 37 mm

11th Year Type Gun	111.3 mm
Type 94 37 mm Gun	166.0 mm
Type 94 37 mm Tank Gun	133.5 mm

### 70 mm

Type 92 Inf Gun	101.0 mm
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### 75 mm

Type 38 Field Gun	292.5 mm*
Type 41 Mtn Gun	184.9 mm
Type 88 7 cm Mobile AA Gun (Special)	496.5 mm
Type 90 Field Gun	424.4 mm
Type 94 Mtn Gun	292.5 mm
Type 94 7 cm Tank Gun	101.0 mm



105 mm

14th Year Type 10 cm AA Gun 565.5 mm

150 mm

4th Year Type 10 cm Howitzer	146.0 mm
Improved 4th Year Type 10 cm Howitzer	258.0 mm
Type 38 10 cm Howitzer	105.0 mm

\*TN: It is assumed that the cases used in Improved Type 38 Field Gun, Type 41 Cavalry Gun, and Type 95 Field Gun are the same length since the cases for all four guns bear the characters for all four guns.

## *Equipment Classes*

Equipment classes are identified as follows:

- |         |   |
|---------|---|
| Class 1 | Supplied for combat. Will continue to be manufactured in the future.  |
| Class 2 | Supplied for combat, but only those already on hand will be used. Will not be manufactured in the future.           |
| Class 3 | With due regard to resources, etc., will be manufactured as necessary.  |
| Class 4 | Supplied chiefly for practice. Will continue to be manufactured in the future.                                      |
| Class 5 | Supplied chiefly for practice, but only those already on hand will be used. Will not be manufactured in the future. |

## *Fillers*

Fillers which have been left untranslated are reported by MEIU #1, JAPANESE MILITARY EXPLOSIVES, to be of the following compositions:

MEIAYAKU	(茗亞藥)	Tetryl
SHŌUYAKU	(硝字藥)	R.D.X.
ŌNAYAKU	(黃那藥)	Picric 50% Dinitronapthalene 50%
ŌSHIYAKU	(黃脂藥)	Picric 90% Wax 10%
SHŌTOYAKU	(硝斗藥)	Ammonium nitrate 50% TNT 50%
HEINEIYAKU	(平寧藥)	Trinitrophenetole
ANGAYAKU	(安瓦藥)	Ammonium nitrate 75% R.D.X. 25%
CHANAYAKU	(茶那藥)	TNT 70% Dinitronapthalene 30%
CHAŌYAKU	(茶黃藥)	TNT 25% Picric 75%
ENTOYAKU	(鹽斗藥)	Potassium 80% TNT 16% Castor bean oil 4%



*Diameter:* 80 mm

*Designation:* Experimental Incendiary Grenade

*Color and Markings:*

*Projectile Length:* 100 mm

*Projectile Length With Fuze:*

*Projectile Weight:* 625 gm

*Weight and Type of Filling:* Gasoline - 440 gm

*Fuzing:*

*Guns Used In:* Hand Thrown

*Remarks:* Range - 20 meters

*Diameter:* 60 mm

*Designation:* Experimental Incendiary Grenade

*Color and Markings:*

*Projectile Length:* 226 mm

*Projectile Length With Fuze:*

*Projectile Weight:* 780 gm

*Weight and Type of Filling:* Gasoline - 250 gm

*Fuzing:* W. P. fuse

*Guns Used In:* Hand Thrown

*Remarks:* An ordinary cider bottle is used  
There is a safety pin

*Diameter:* 55.8 mm

*Designation:* Experimental Incendiary Hand Grenade

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:* 342.9 mm

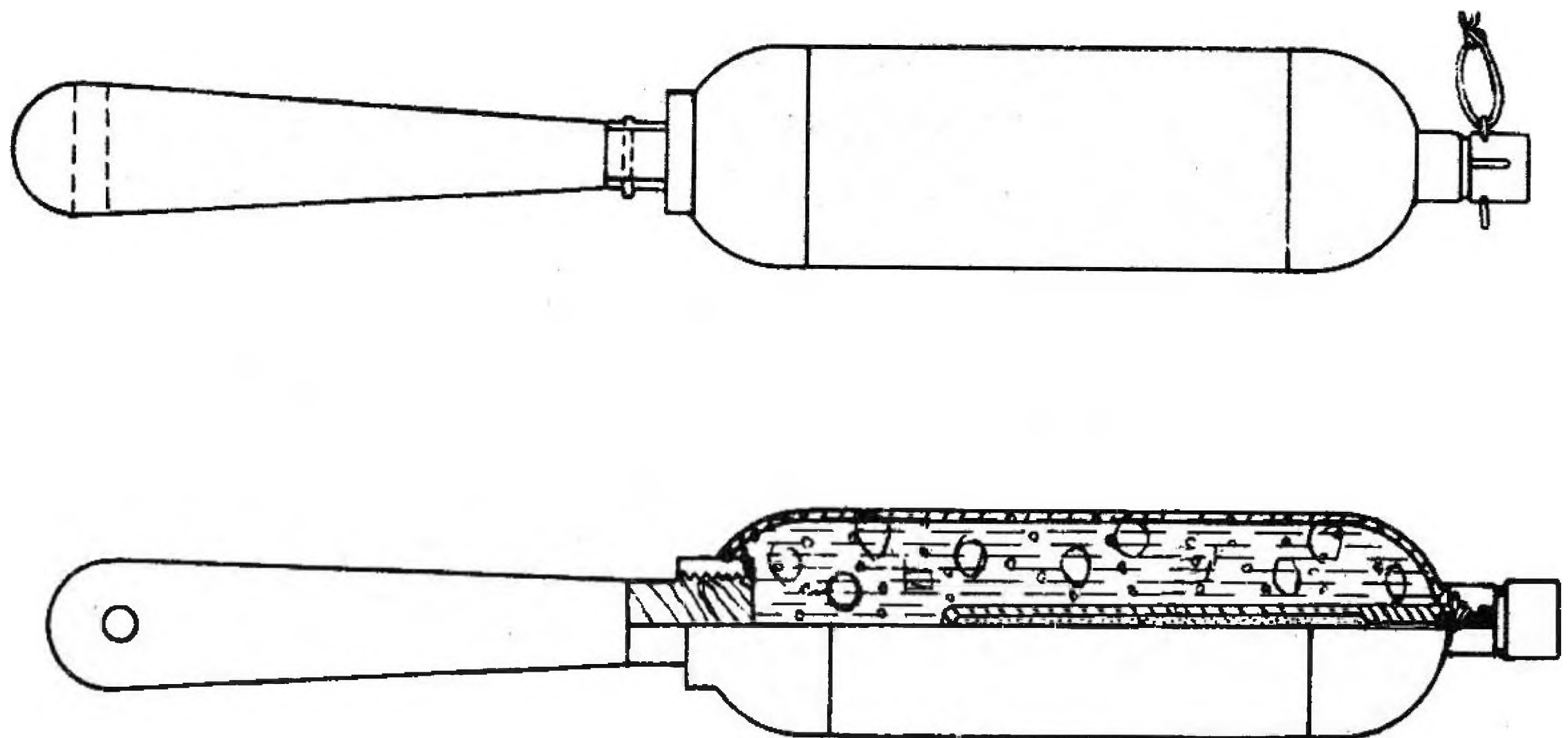
*Projectile Weight:* 840 gm

*Weight and Type of Filling:* Black powder - 52.5 gm  
Incendiary (small pieces of phosphorous-impregnated rubber, carbon disulphide and crude oil) - 390 gm

*Fuzing:* 10th Year Type Time Hand Grenade

*Guns Used In:* Hand Thrown

*Remarks:* Effective radius - 30 meters





*Diameter:* 50 mm

*Designation:* Incendiary Hand Grenade

*Color and Markings:* Unpainted brass cover

*Projectile Length:*

*Projectile Length With Fuze:* 139 mm

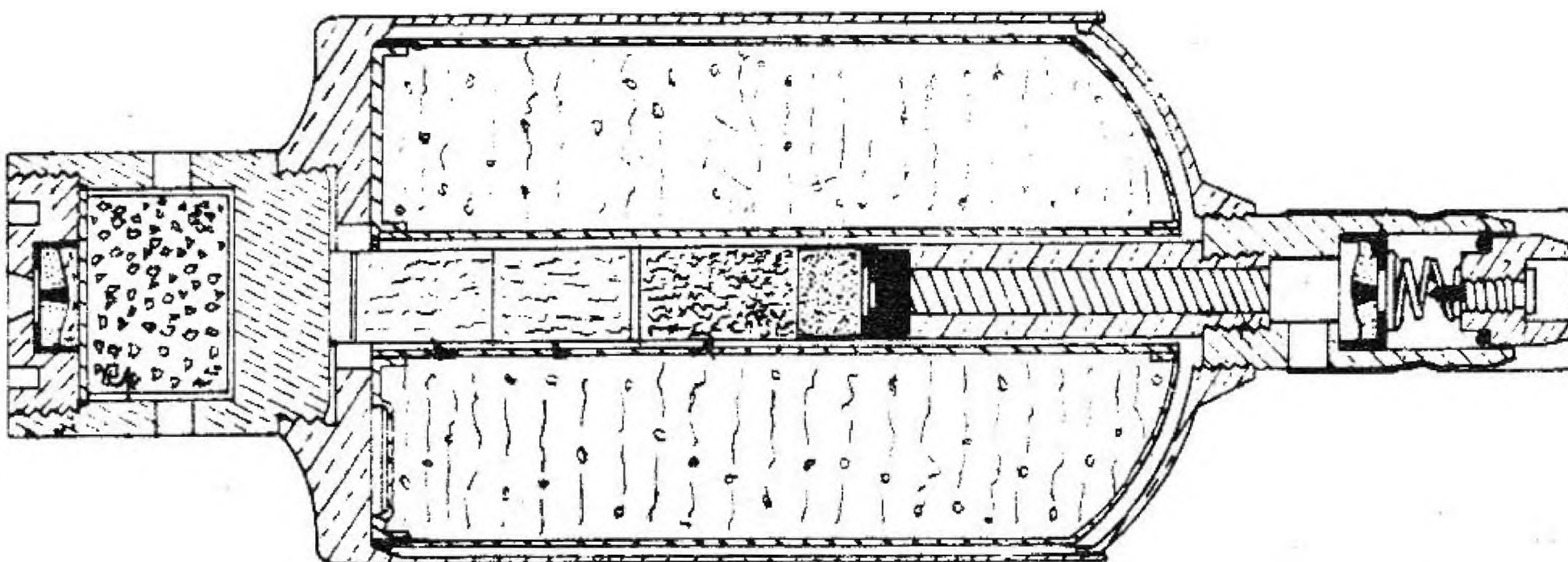
*Projectile Weight:* 500 gm

*Weight and Type of Filling:* Picric acid - 6 gm  
W. P. - 120 gm

*Fuzing:* 10th Year Type Time Hand Grenade

*Guns Used In:* Type 89 Heavy Grenade Discharger  
Hand Thrown

*Remarks:* 8 second delay



*Diameter:* 70 mm

*Designation:* Frangible Incendiary Grenade

*Color and Markings:*

*Projectile Length:* 230 mm

*Projectile Length With Fuze:*

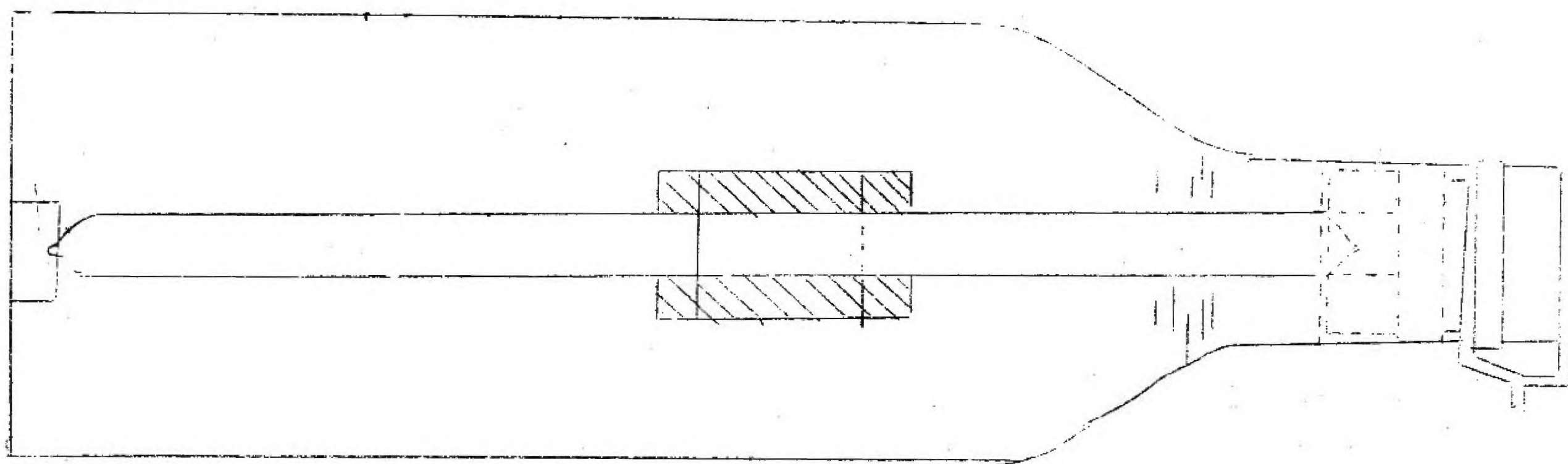
*Projectile Weight:*

*Weight and Type of Filling:* Several types of oil  
Incendiary compound

*Fuzing:*

*Guns Used In:* Hand Thrown

*Remarks:* A lead weight is attached to the central tube  
which is filled with the incendiary compound  
to facilitate breaking





Diameter: 53 mm

Designation: Temporarily Designated Type 3 Self-Projected  
Illuminating Candle

Color and Markings:

Projectile Length: 205 mm

Projectile Length With Fuze:

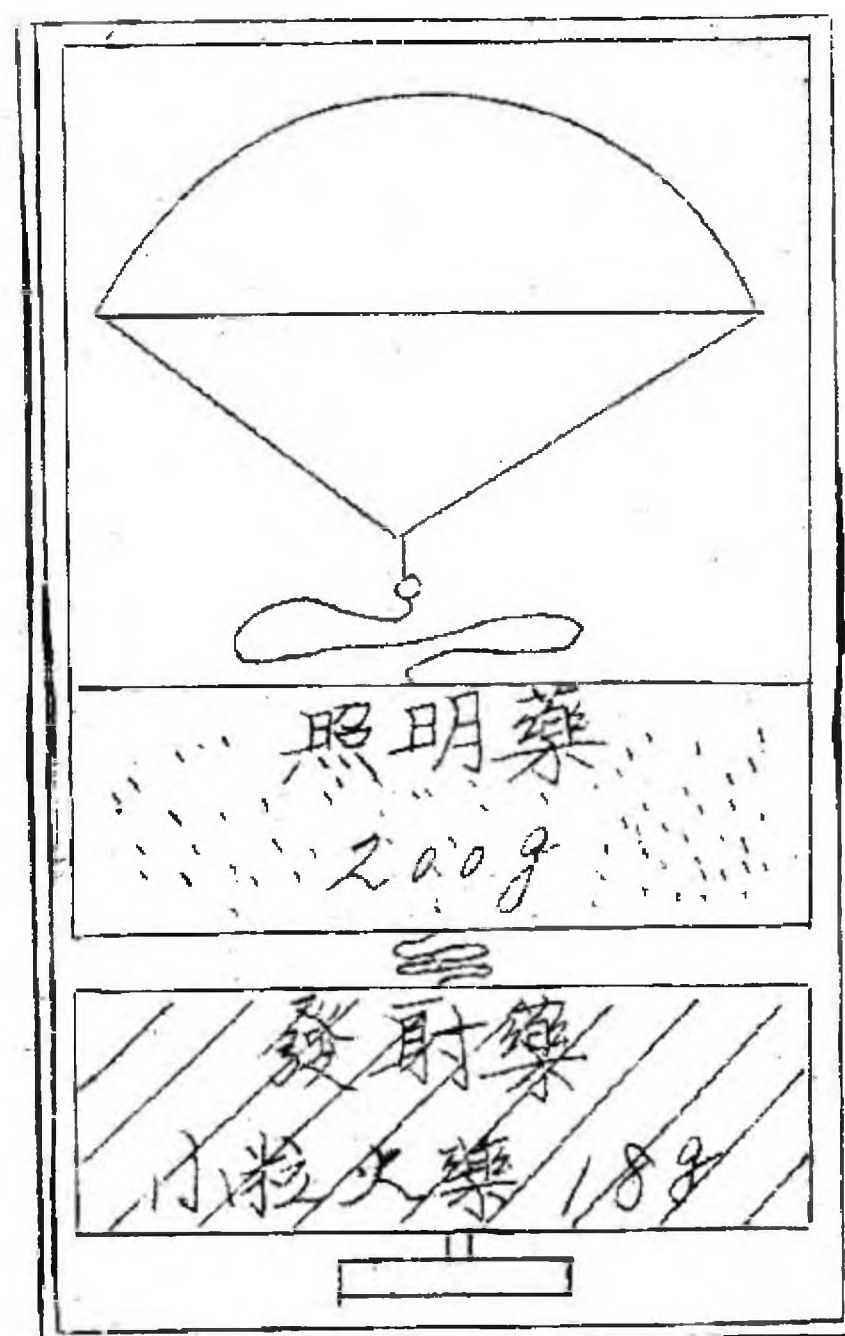
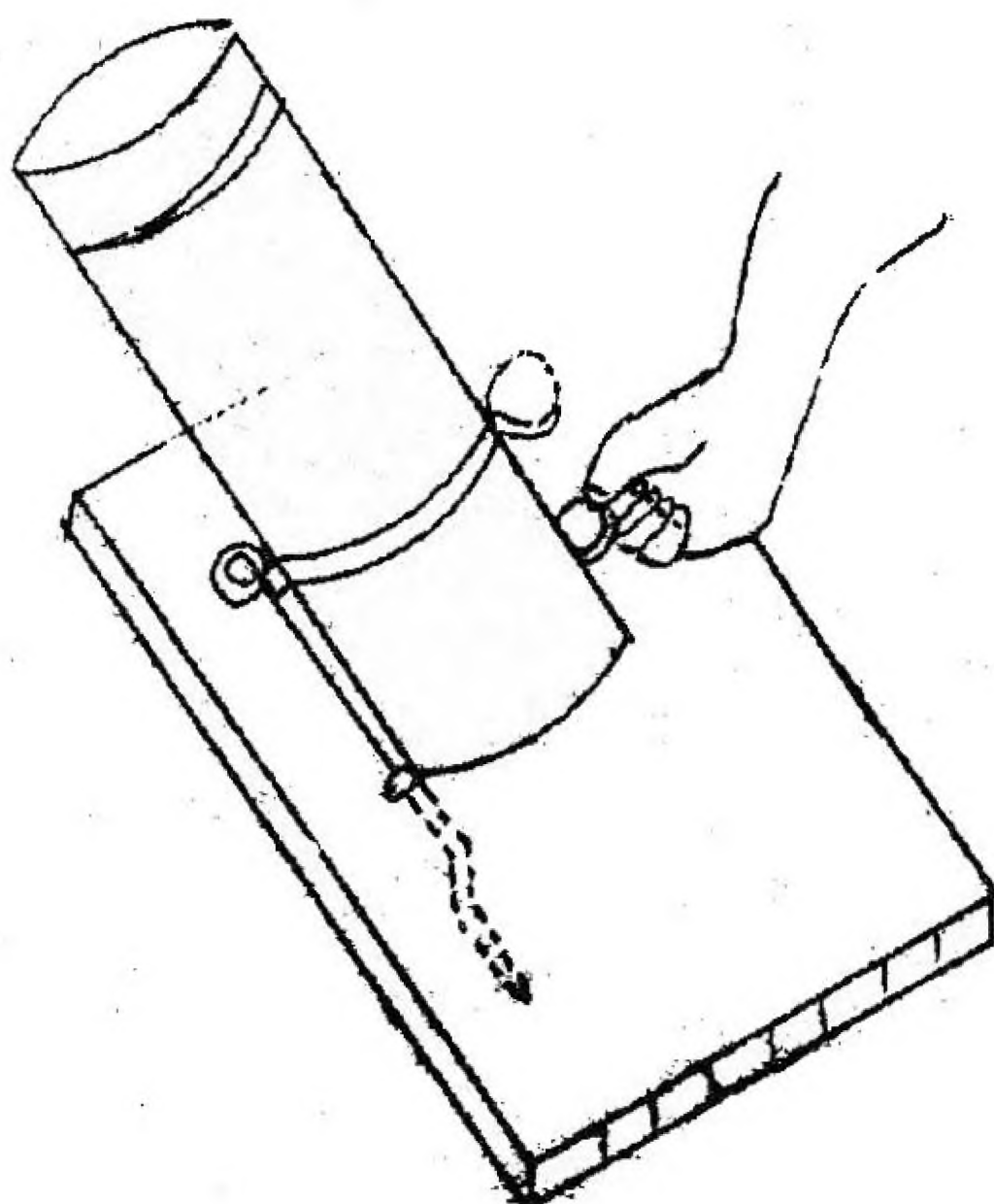
Projectile Weight: Approx. 860 gm

Weight and Type of Filling: Illuminating compound - 200 gm  
Fine grain powder - 18 gm

Fuzing:

Guns Used In: Self-projected

Remarks: Maximum range - approx. 200 meters  
Height of parachute ascent - approx. 50 meters  
Burning time - 45 seconds  
Illumination - 29,000 candle power  
Area illuminated - 350 meters



*Diameter:*

*Designation:* 10th Year Type Illuminating Hand Grenade

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

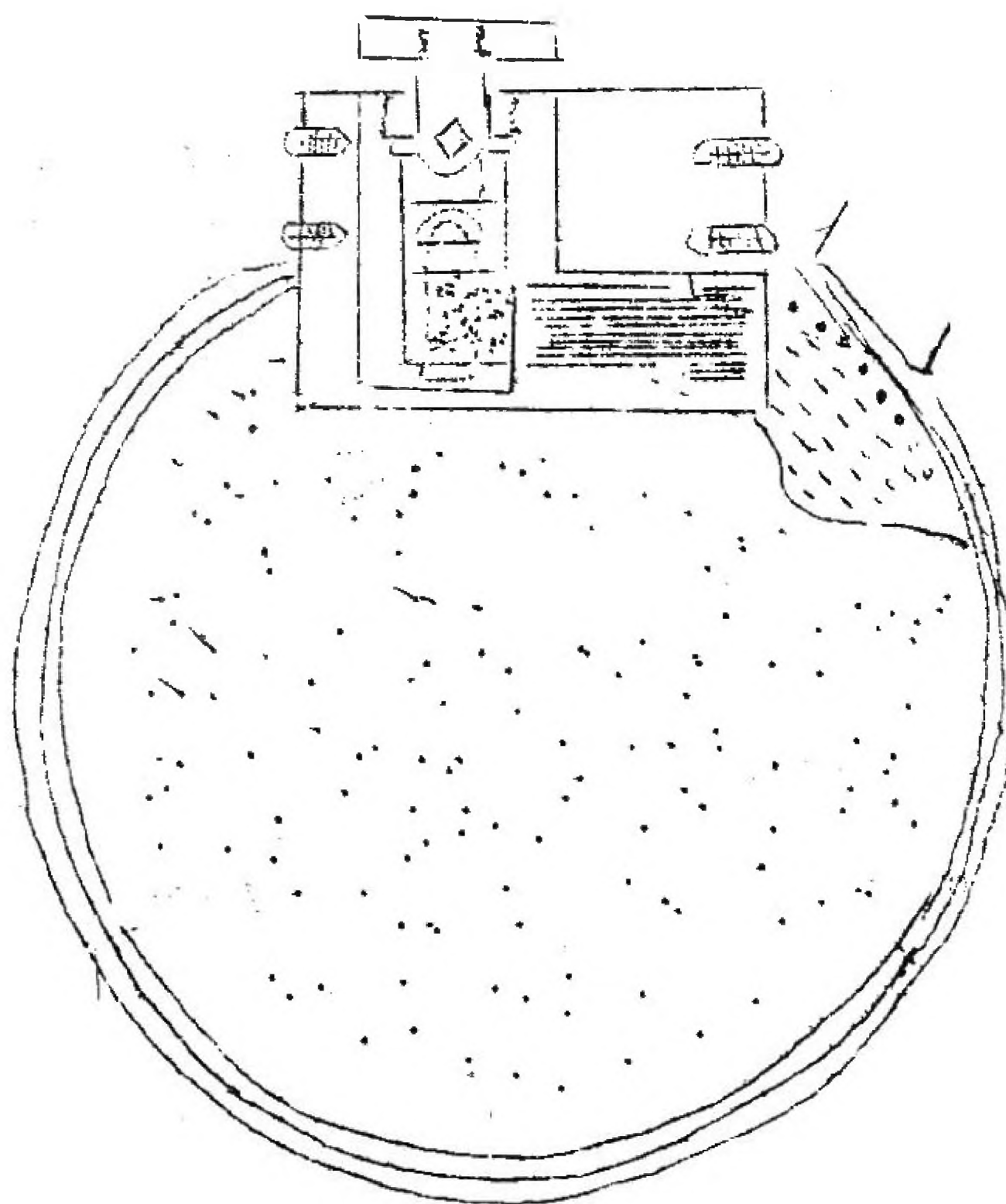
*Projectile Weight:* Approx. 320 gm

*Weight and Type of Filling:* Illuminating compound - 200 gm

*Fuzing:*

*Guns Used In:* Hand Thrown

*Remarks:*





*Diameter: 58 mm*

*Designation: Experimental Smoke Grenade*

*Color and Markings:*

*Projectile Length: 130 mm*

*Projectile Length With Fuze:*

*Projectile Weight: 820 gm*

*Weight and Type of Filling: W.P. - 550 gm*

*Fuzing: All-ways*

*Guns Used In: Hand Thrown*

*Remarks: Range - 20 meters*  
*Case thickness - .8 mm*

*Diameter:*

*Designation:* Type 94 Small Smoke Candle A

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 1.0 kg

*Weight and Type of Filling:* "A" Smoke Agent - 850 gm

*Fuzing:*

*Guns Used In:* Hand Thrown

*Remarks:* "A" Smoke Agent: chlorsulphonic acid, 43%;  
sulphur trioxide, 57%



*Diameter:*

*Designation:* Type 94 Small Smoke Candle B

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

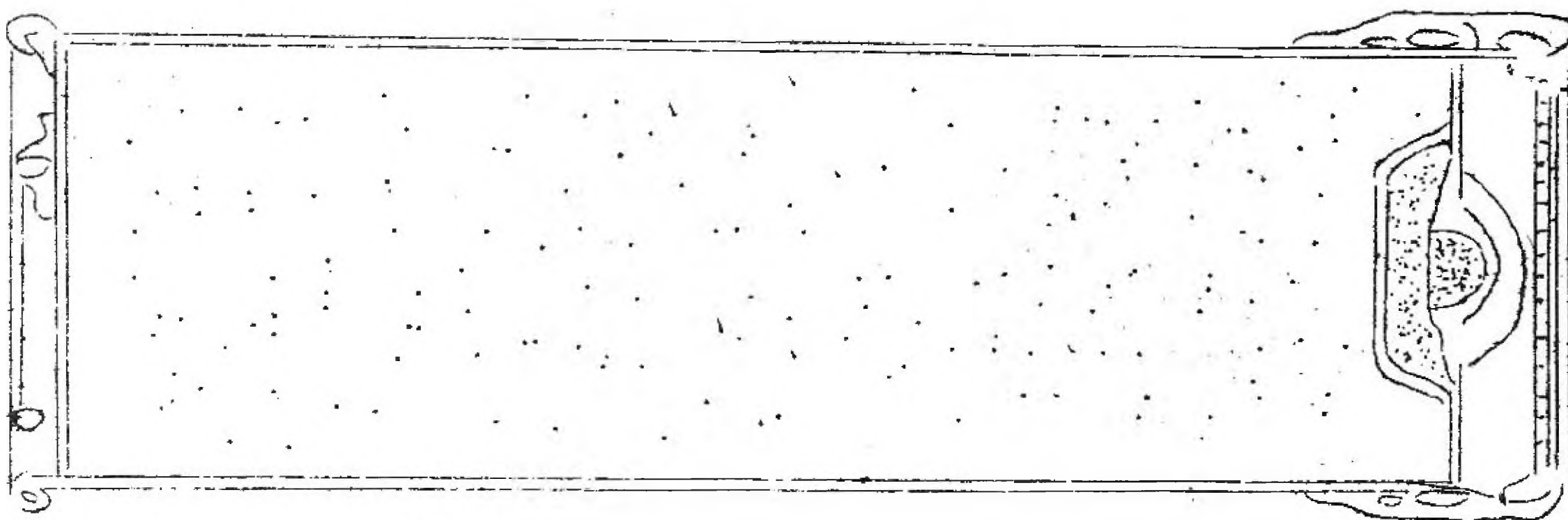
*Projectile Weight:* 750 gm

*Weight and Type of Filling:* "B" Smoke Agent - 600 gm

*Fuzing:*

*Guns Used In:* Hand Thrown

*Remarks:* "B" Smoke Agent: chlorsulphonic acid, 33%;  
sulphur trioxide, 57%;  
sulphuric acid, 10%



*Diameter:*

*Designation:* Type 94 Large Smoke Candle A,B

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* A: 20.0 kg

B: 16.0 kg

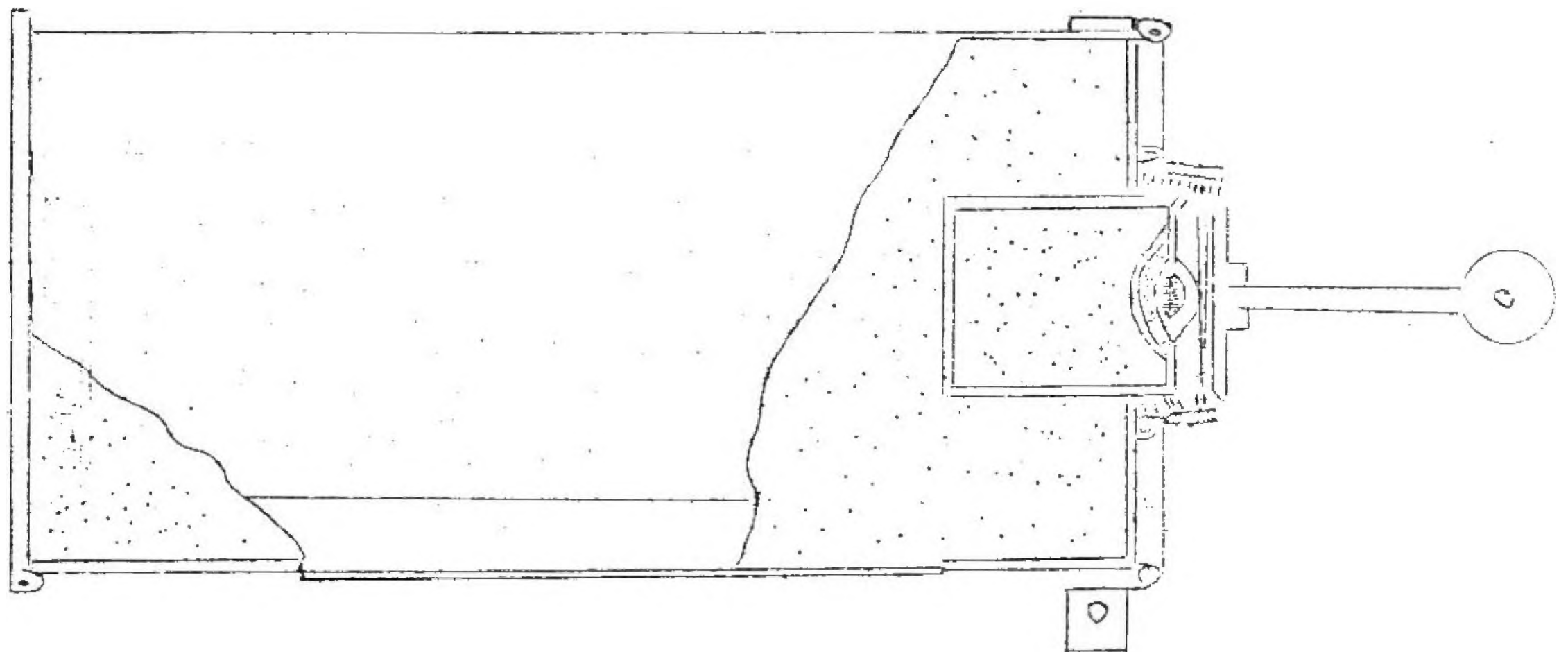
*Weight and Type of Filling:* A: "A" Smoke Agent - 18.2 kg

B: "B" Smoke Agent - 14.15 kg

*Fuzing:*

*Guns Used In:* Hand Thrown

*Remarks:* See Type 94 Small Smoke Candle A and B for  
composition of Smoke Agents



*Diameter:*

*Designation:* Practice Hand Grenade

*Color and Markings:* Smooth body

*Projectile Length:*

*Projectile Length With Fuze:*

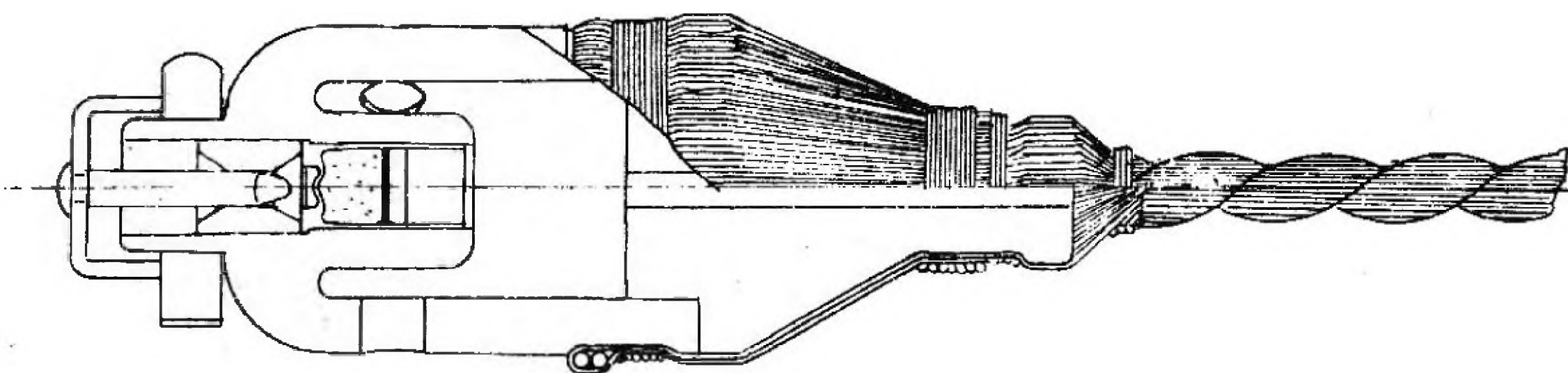
*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Hand Thrown

*Remarks:* Wooden base





*Diameter:*

*Designation:* Hand Grenade

*Color and Markings:* Serrated body

*Projectile Length:*

*Projectile Length With Fuze:*

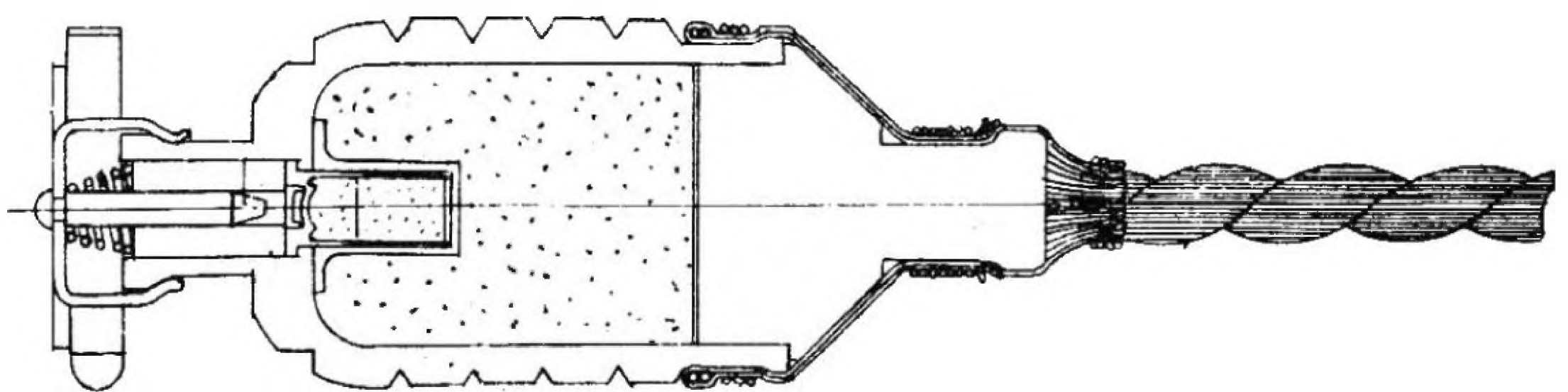
*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Hand Thrown

*Remarks:* Mercury fulminate cap  
Wooden base



*Diameter:*

*Designation:* Hand Grenade

*Color and Markings:* Horizontal grooves around body

*Projectile Length:* 131 mm

*Projectile Length With Fuze:*

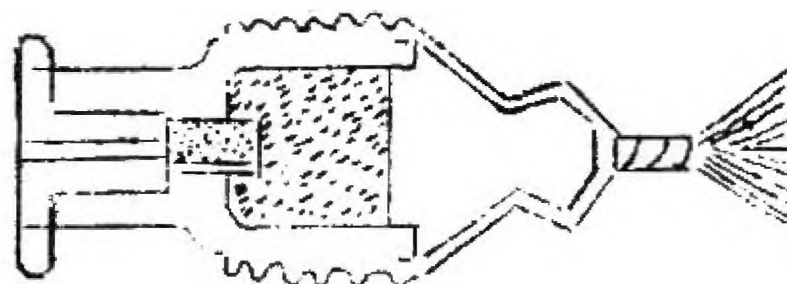
*Projectile Weight:*

*Weight and Type of Filling:* TNT - 65 gm

*Fuzing:* Impact

*Guns Used In:* Hand Thrown

*Remarks:* Old type grenade



*Diameter:* 46.3 mm

*Designation:* Experimental Improved Hand Grenade w/Time  
Fuze

*Color and Markings:*

*Projectile Length:* 131 mm

*Projectile Length With Fuze:*

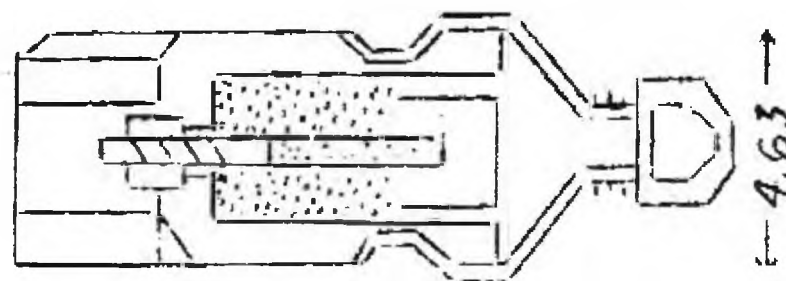
*Projectile Weight:* 480 gm

*Weight and Type of Filling:* TNT - 30 gm

*Fuzing:* Time

*Guns Used In:* Hand Thrown

*Remarks:* 4-5 seconds time delay





*Diameter:* Top - 30 mm; bottom - 70 mm

*Designation:* Type 3 Conical Hand Mine

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

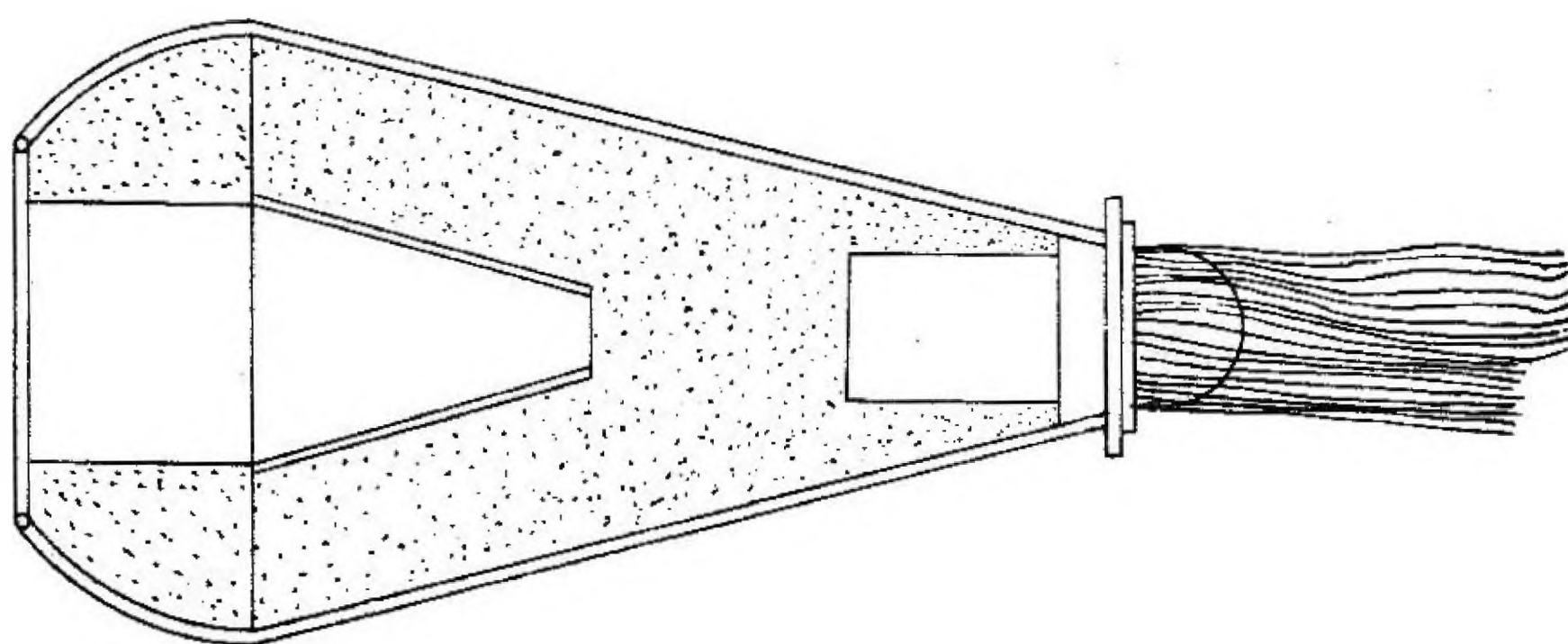
*Projectile Weight:* 700 gm

*Weight and Type of Filling:* TNT, cyclonite and tetryl - 500  
gm

*Fuzing:* All-ways

*Guns Used In:* Hand Thrown.

*Remarks:* Cloth cover  
250 mm tail of palm fibers or grass attached  
to the fuze end of the mine  
Penetrating power - 70 mm of armor plate



*Diameter:*

*Designation:* Type 91 Practice Hand Grenade w/Time Fuze

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

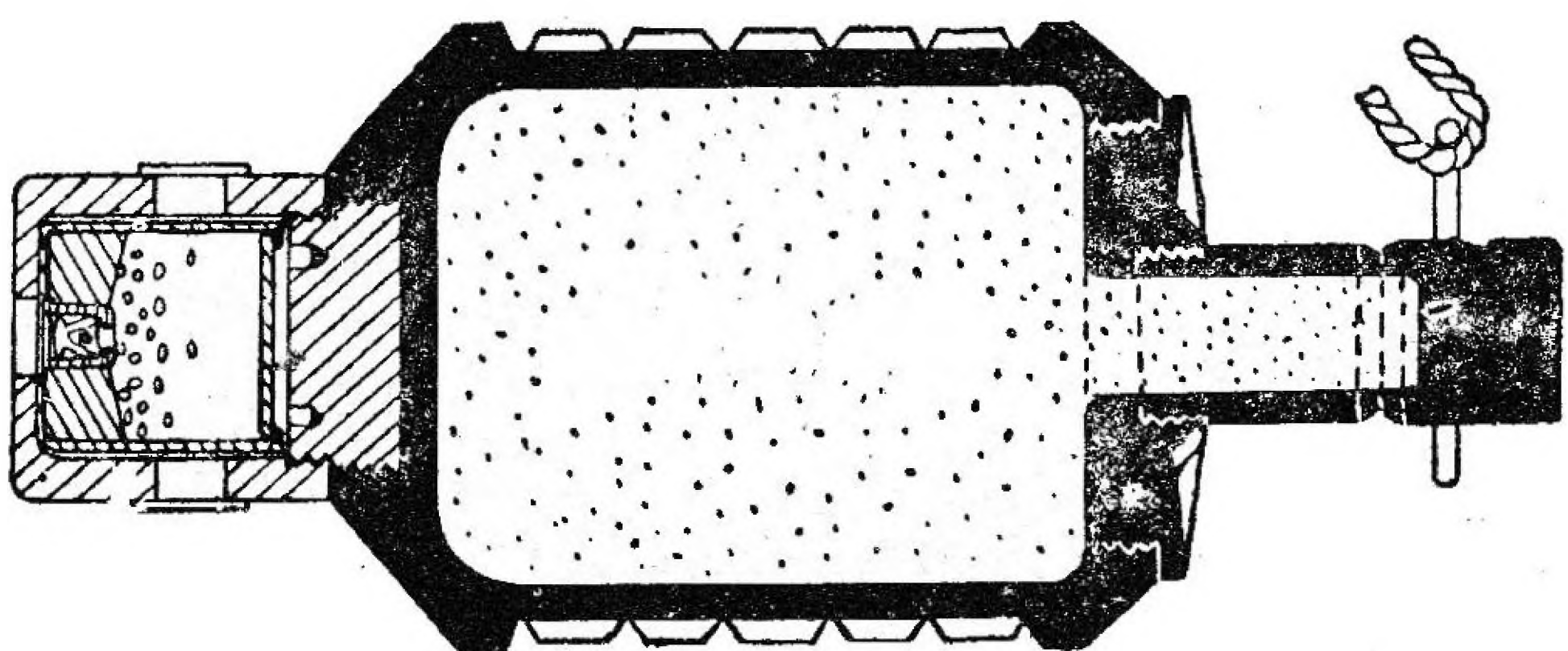
*Projectile Weight:* 520 gm

*Weight and Type of Filling:* Sand

*Fuzing:* Dummy

*Guns Used In:* Hand Thrown  
10th Year Type Grenade Discharger

*Remarks:* Equipment Class - 4



*Diameter:*

*Designation:* Type 91 Hand Grenade w/Time Fuze

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:* 123.9 mm

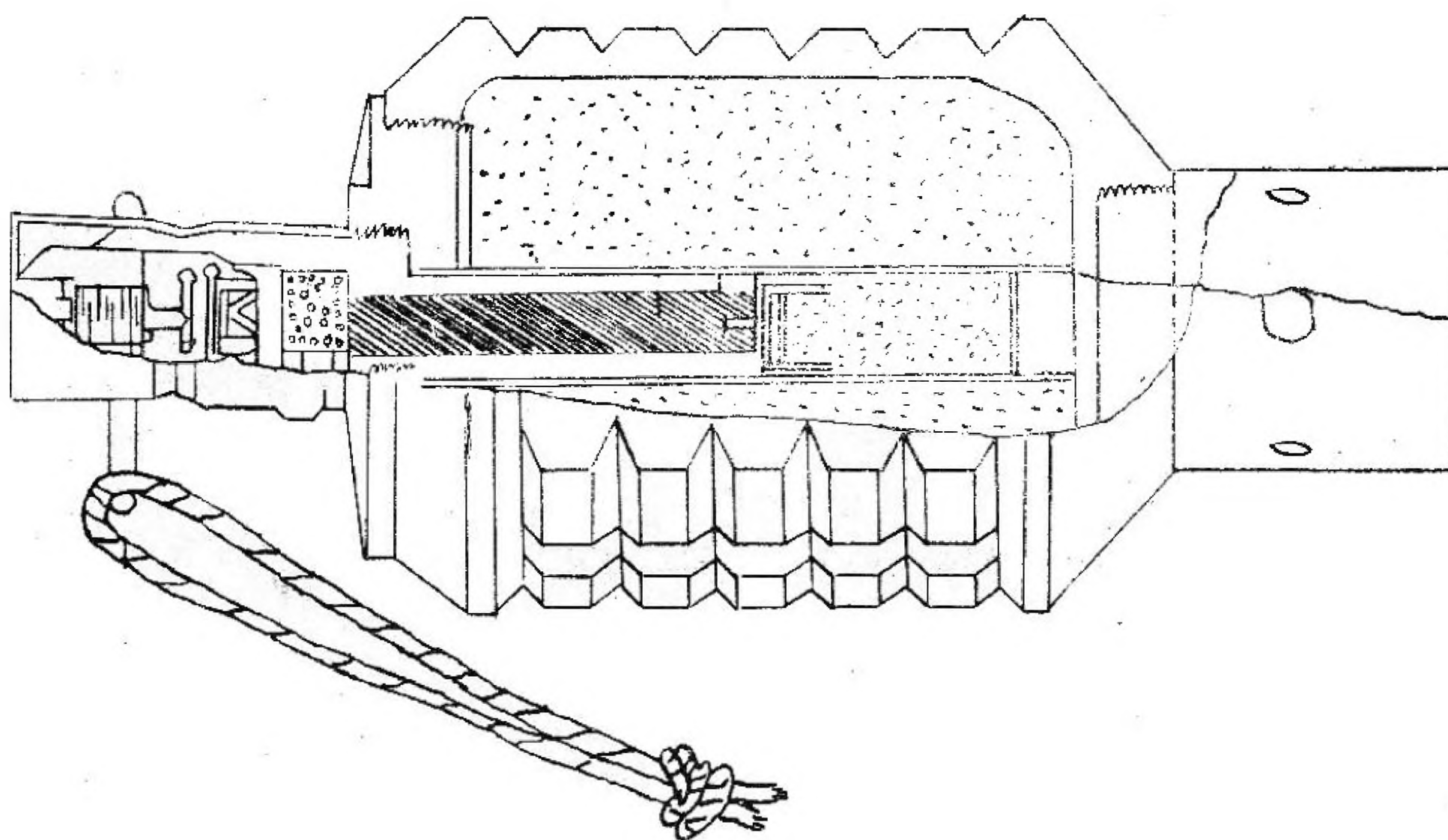
*Projectile Weight:* 520 gm

*Weight and Type of Filling:* TNT (pressed) - 65 gm  
ENTOYAKU - 75 gm

*Fuzing:* 10th Year Type Time Hand Grenade

*Guns Used In:* Hand Thrown  
10th Year Type Grenade Discharger  
Type 89 Heavy Grenade Discharger

*Remarks:* Weight also given as 540 gm  
Effective radius - 8 meters  
7-8 seconds time delay





*Diameter:* 49.8 mm

*Designation:* Type 97 Hand Grenade

*Color and Markings:* Serrated body  
Purple cap

*Projectile Length:*

*Projectile Length With Fuze:*

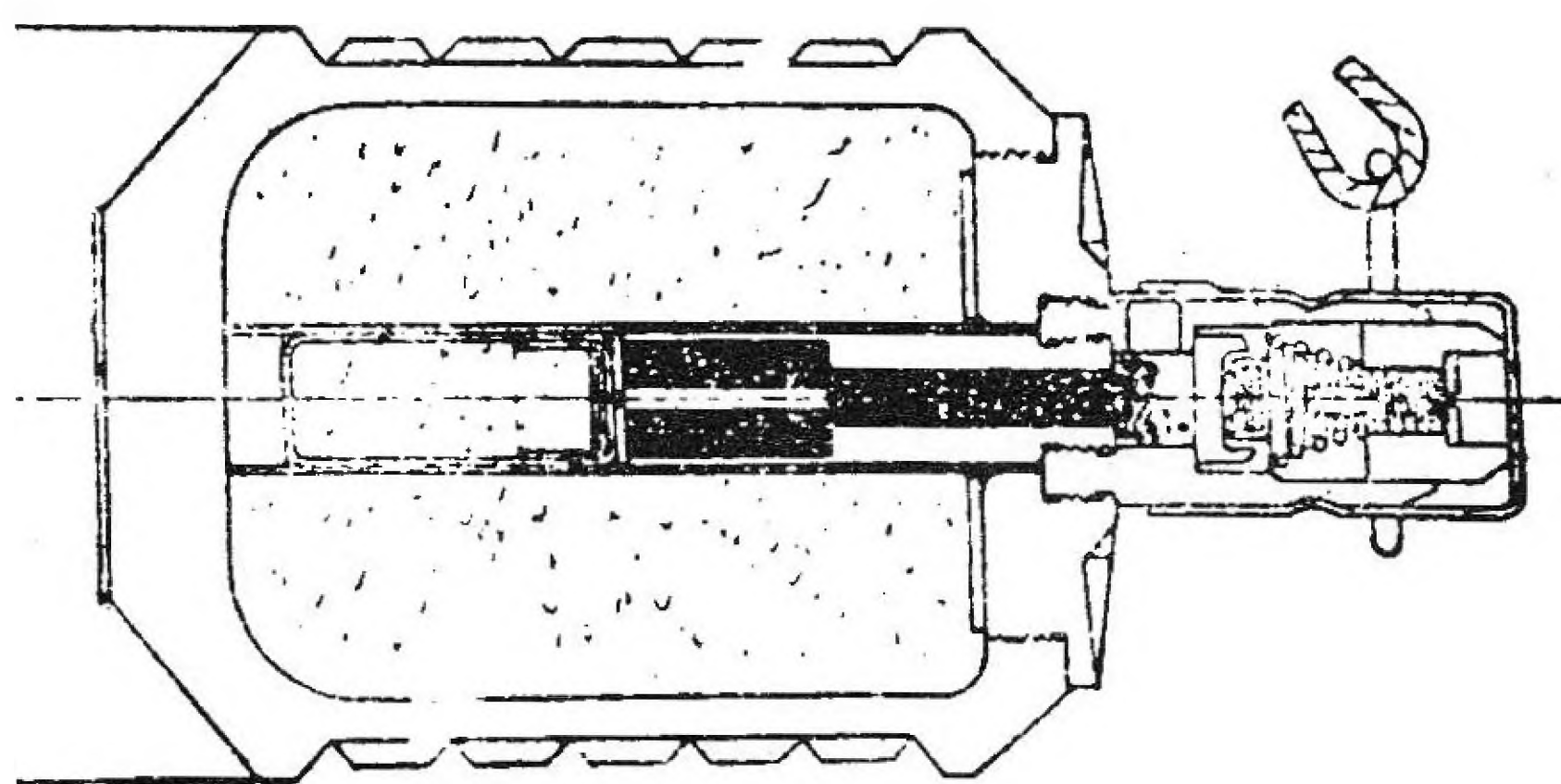
*Projectile Weight:* 445 gm

*Weight and Type of Filling:* TNT - 65 gm

*Fuzing:* Type 97 Fuze for Hand Grenade

*Guns Used In:* Hand Thrown

*Remarks:* 4-5 seconds time delay  
Effective radius - 8 meters  
Differs from Type 91 Grenade only in lack of  
propellant charge container  
Equipment Class - 3



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

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30 APRIL 1945.

*Diameter:*

*Designation:* Type 98 Stick Grenade (TN: Same as 15th Year  
Type Stick Grenade)

*Color and Markings:* Black

*Projectile Length:* 70 mm

*Projectile Length With Fuze:*

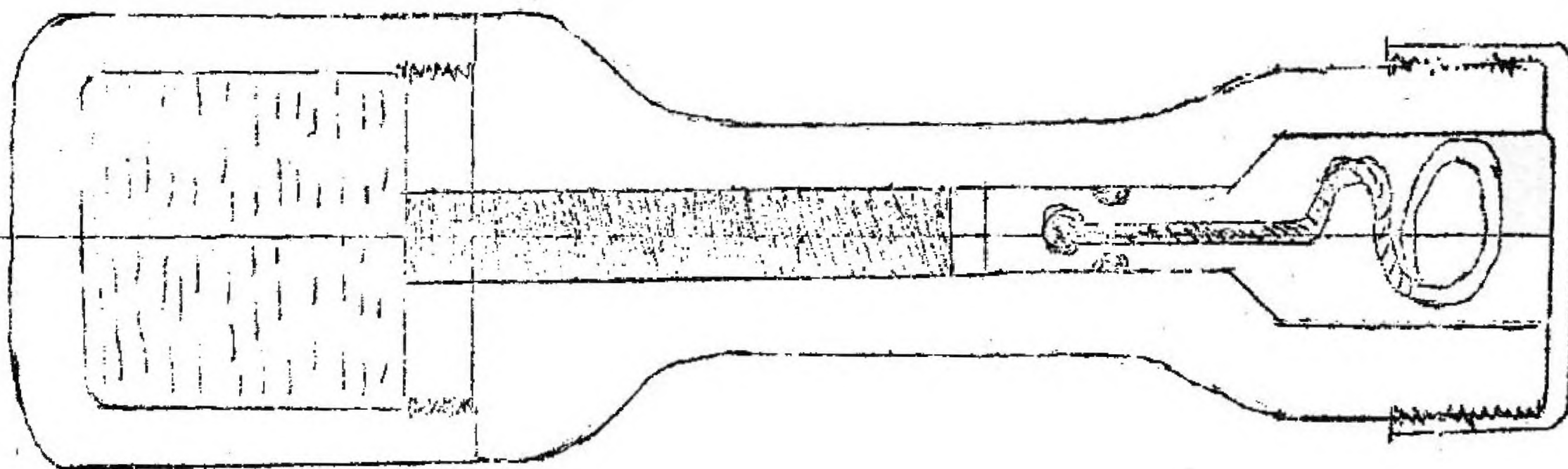
*Projectile Weight:* 730 gm

*Weight and Type of Filling:* TNT - 55 gm

*Fuzing:*

*Guns Used In:* Hand Thrown

*Remarks:* 5 seconds time delay  
Effective radius - 10 meters



*Diameter:* 50 mm

*Designation:* Experimental Type 98 Stick Grenade A

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:* 201.9 mm

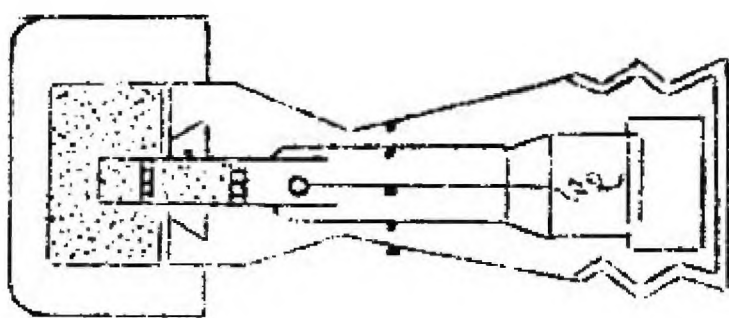
*Projectile Weight:* 560 gm

*Weight and Type of Filling:* Picric acid (pressed) - 78 gm

*Fuzing:* Time

*Guns Used In:* Hand Thrown

*Remarks:* 4-5 seconds delay





*Diameter:* 45 mm

*Designation:* Experimental Type 98 Stick Grenade B

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:* 207.4 mm

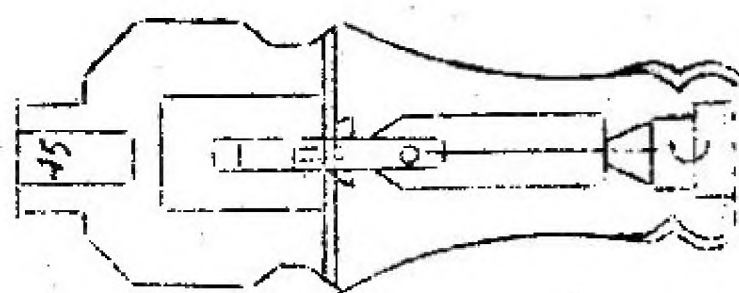
*Projectile Weight:* 530 gm

*Weight and Type of Filling:* Picric acid (pressed) - 30 gm

*Fuzing:* Time

*Guns Used In:* Hand Thrown

*Remarks:* 4-5 seconds delay



*Diameter:* 45.2 mm

*Designation:* Type 99 Hand Grenade A

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

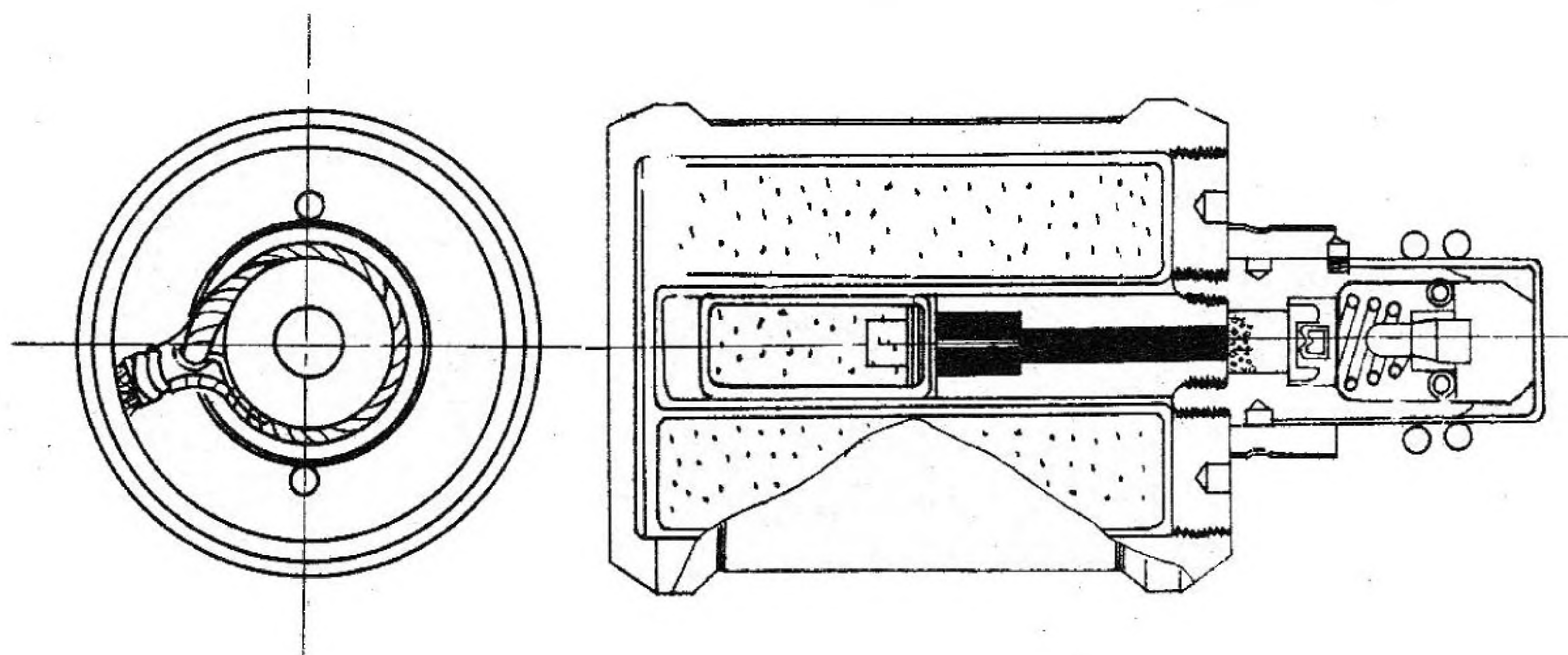
*Projectile Weight:* 300 gm

*Weight and Type of Filling:* Picric acid (pressed) - 58 gm

*Fuzing:* Type 99 Hand Grenade A

*Guns Used In:* Hand Thrown  
Type 100 Grenade Launcher

*Remarks:* 4-5 seconds delay  
Effective radius - 5 meters  
Maximum range with launcher - 120 meters  
Equipment Class - 1



*Diameter:*

*Designation:* Type 99 Hand Grenade B

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

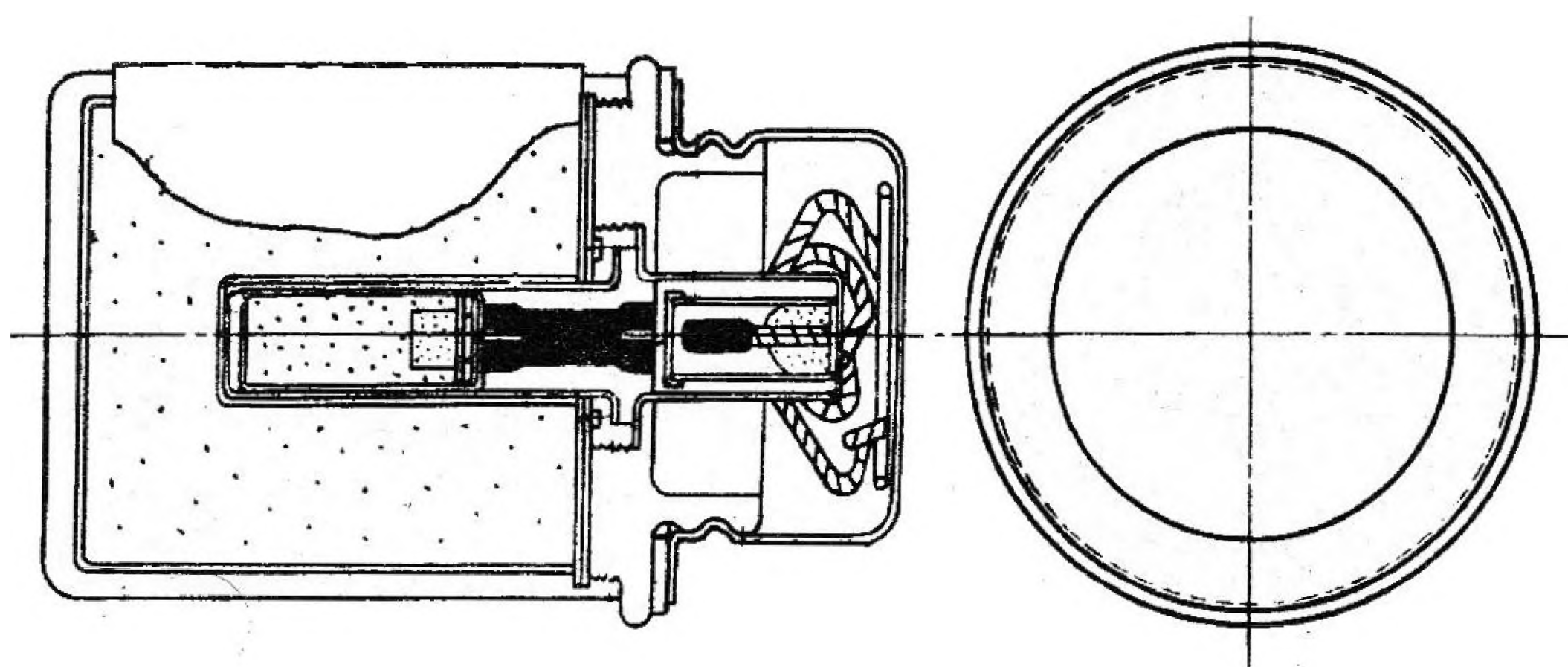
*Projectile Weight:* 273 gm

*Weight and Type of Filling:* Picric acid (pressed) - 55 gm

*Fuzing:* Friction primer

*Guns Used In:* Hand Thrown

*Remarks:* 4-5 seconds delay  
Total weight also given as 173 gm  
Effective radius - 5 meters  
Equipment Class - 1



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

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30 APRIL 1945.

*Diameter:*

*Designation:* 10th Year Type Practice Hand Grenade w/Time  
Fuze (Firing Practice)

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

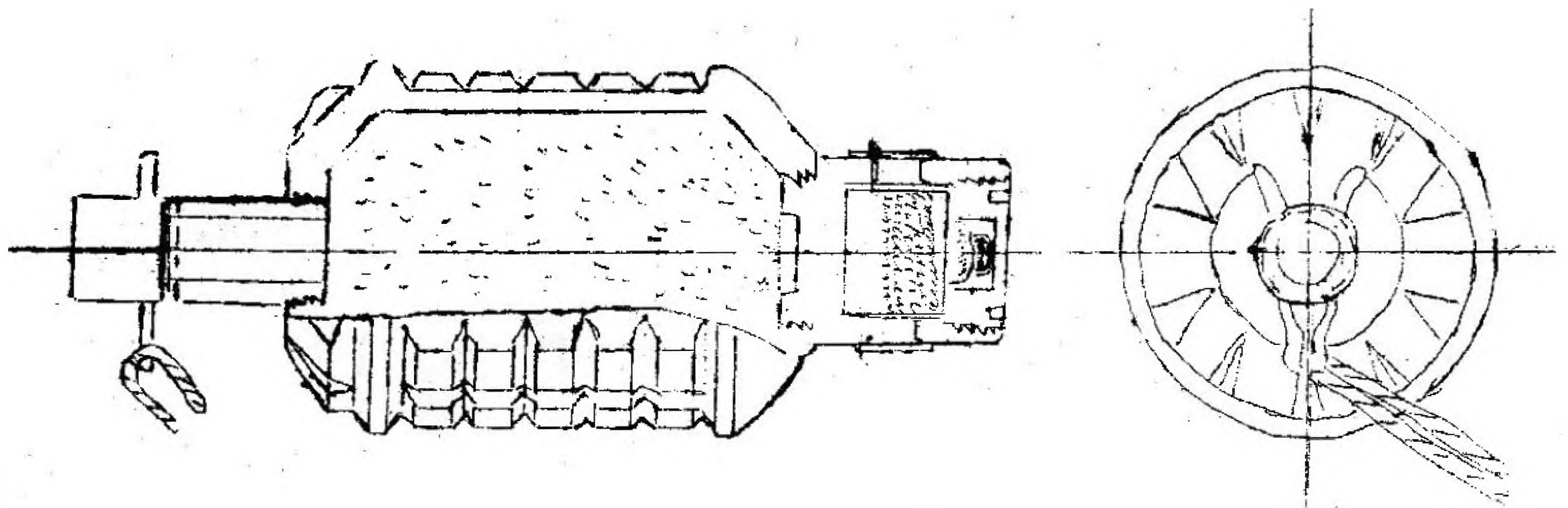
*Projectile Weight:*

*Weight and Type of Filling:* Sand

*Fuzing:* Dummy

*Guns Used In:* 10th Year Type Grenade Discharger

*Remarks:*





*Diameter:*

*Designation:* 10th Year Type Practice Hand Grenade w/Time  
Fuze (Throwing Practice)

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

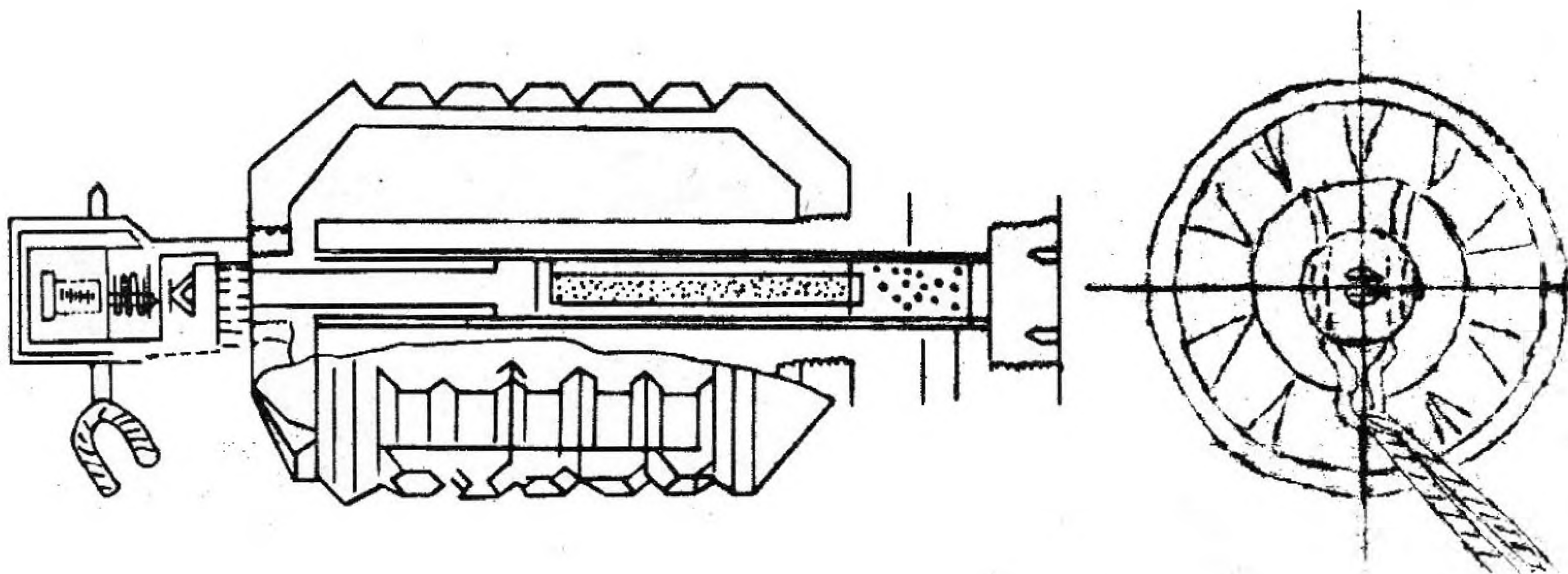
*Projectile Weight:* 540 gm

*Weight and Type of Filling:* Fine grain powder - .1 gm

*Fuzing:* 10th Year Type Time Hand Grenade

*Guns Used In:* Hand Thrown  
10th Year Type Grenade Discharger

*Remarks:* 7-8 seconds time delay  
Equipment Class - 4



*Diameter:*

*Designation:* 10th Year Type Hand Grenade w/Time Fuze

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:* 124.5 mm

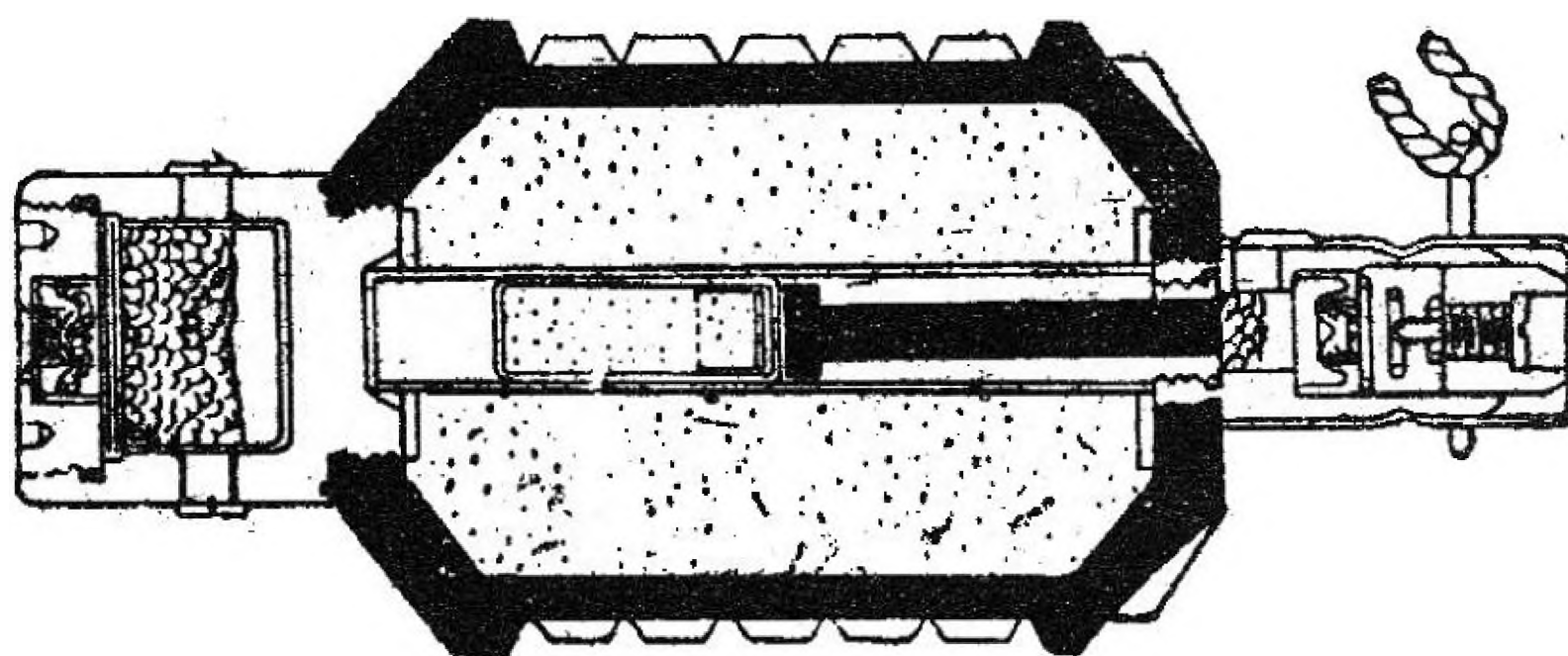
*Projectile Weight:* 530 gm

*Weight and Type of Filling:* TNT - 65 gm

*Fuzing:* 10th Year Type Time Hand Grenade

*Guns Used In:* 10th Year Type Grenade Discharger  
Hand Thrown

*Remarks:* Filler also given as ONAYAKU  
Effective radius - approx. 8 meters  
Equipment Class - 2



*Diameter:* 6.5 mm

*Designation:* Snub-nosed practice projectile

*Color and Markings:*

*Projectile Length:* 7.5 mm

*Projectile Length With Fuze:*

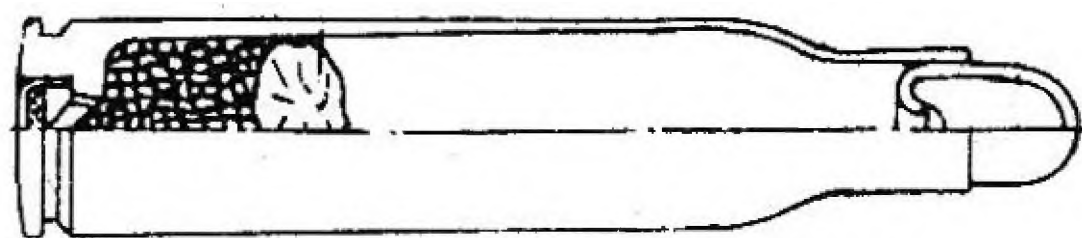
*Projectile Weight:* 2.30 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 38 Carbine  
Type 38 Rifle  
Type 91 Vehicle-mounted LMG  
11th Year Type LMG  
Type 96 LMG  
3rd Year Type MG  
Type 38 MG

*Remarks:* Jacket - copper  
Core - lead  
Equipment Class - 4



*Diameter:* 6.5 mm

*Designation:* Type 38 Rifle Ball Projectile

*Color and Markings:*

*Projectile Length:* 32.5 mm

*Projectile Length With Fuze:*

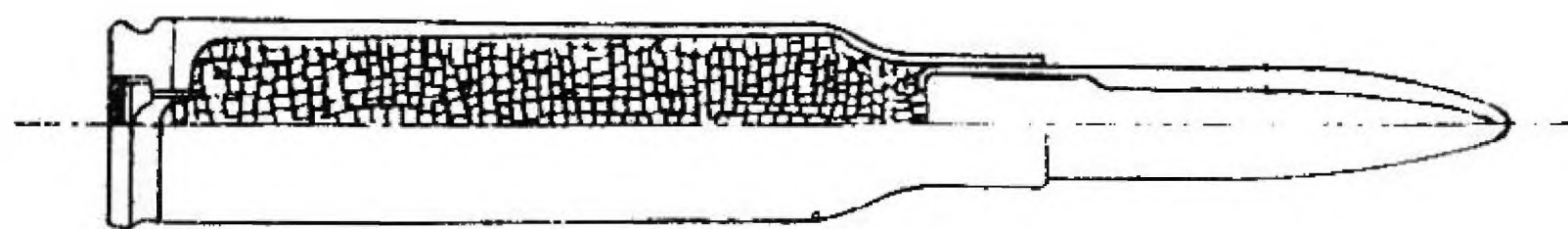
*Projectile Weight:* 9 gm

*Weight and Type of Filling:*

*Fuzing:*

<i>Guns Used In:</i>	Type 38 Carbine	11th Year Type LMG
	Type 38 Rifle	Type 91 Vehicle-
	Type 44 Carbine	mounted LMG
	Type 97 Snipers Rifle	Type 96 LMG
	Type E Rifle	3rd Year Type MG
		Type 38 MG

*Remarks:* Jacket - nickel  
Core - hard lead  
Equipment Class - 1





JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 6.5 mm

*Designation:* Steel Jacketed Projectile

*Color and Markings:* Black band around primer

*Projectile Length:* 32.5 mm

*Projectile Length With Fuze:*

*Projectile Weight:* 8.70 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 96 LMG  
Type 38 Rifle  
Type 38 Carbine  
Type 91 Vehicle-mounted LMG  
11th Year Type LMG  
Type 38 MG  
3rd Year Type MG

*Remarks:* Jacket - Mk.4 steel (or copper)  
Core - Hard lead  
Equipment Class - 1

JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 6.5 mm

*Designation:* Type 92 Jacketed Projectile

*Color and Markings:* Black band around primer

*Projectile Length:* Core - 29.5 mm

*Projectile Length With Fuze:*

*Projectile Weight:* 7.00 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 38 Rifle

*Remarks:* Jacket - Mk. 2 brass  
Core - Mk. 3 copper for bullets  
Equipment Class - 1

JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 6.5 mm

*Designation:* Type 92 AP Projectile

*Color and Markings:* Black band on crimp

*Projectile Length:* 32.5 mm

*Projectile Length With Fuze:*

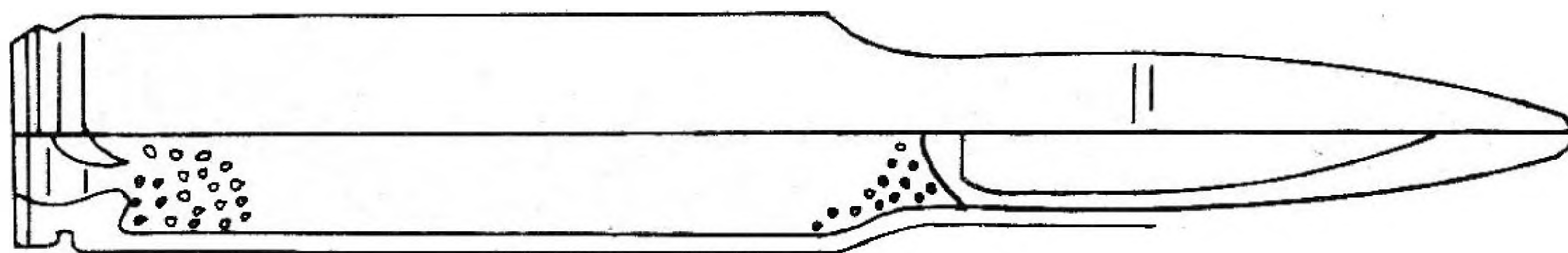
*Projectile Weight:* 7 gm

*Weight and Type of Filling:*

*Fuzing:*

<i>Guns Used In:</i> 11th Year Type LMG	Type 97 Sniper's Rifle
Type 91 Vehicle-	Type E Rifle
mounted LMG	11th Year Type LMG
Type 38 Rifle	Type 96 LMG
Type 38 Carbine	3rd Year Type MG
Type 44 Carbine	Type 38 MG

*Remarks:* Jacket - Mk. 2 brass  
Core - Mk. 3 rifle steel  
Equipment Class - A



*Diameter:* 7.7 mm

*Designation:* Snub-nosed Practice Projectile

*Color and Markings:*

*Projectile Length:* 8 mm

*Projectile Length With Fuze:*

*Projectile Weight:* 3 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 99 Rifle

*Remarks:* Jacket - copper  
Core - lead  
Equipment Class - 4

*Diameter:* 7.7 mm

*Designation:* Type 92 Cupro-Nickel Jacketed Projectile

*Color and Markings:*

*Projectile Length:* 29.3 mm

*Projectile Length With Fuze:*

*Projectile Weight:* 10 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 99 Rifle      Type 97 Tank HMG  
                  Type 99 LMG        Type 92 HMG

*Remarks:* Jacket - Copper nickel  
Core - Mk. 2 Hard lead  
Equipment Class - 1



*Diameter:* 7.7 mm

*Designation:* Ball Projectile

*Color and Markings:* Black painted on primer

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:* None

*Guns Used In:* Type 92 7.7 mm Flexible MG, Modif. 1

*Remarks:*

JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

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30 APRIL 1945.

*Diameter:* 7.7 mm

*Designation:* Type 89 Ball Projectile

*Color and Markings:*

*Projectile Length:* 29.3 mm

*Projectile Length With Fuze:*

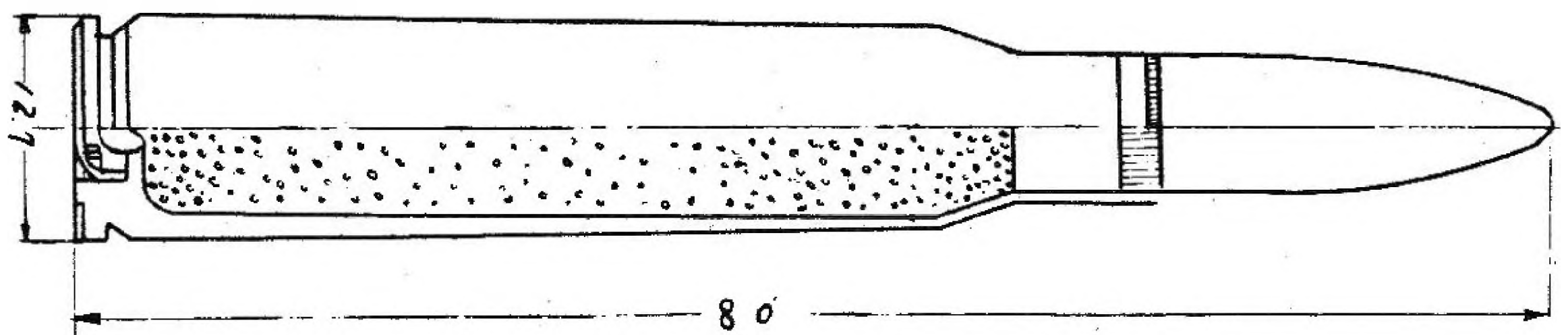
*Projectile Weight:* 10.5 gm

*Weight and Type of Filling:*

*Fuzing:*

<i>Guns Used In:</i>	Type 89 Flexible MG	Type 89 Fixed MG
	Type 89 Flexible	Type 92 HMG
	MG (Special)	

*Remarks:* Jacket - gilding metal  
Core - Mk. 2 hard lead  
Equipment Class - 1  
Cartridge for Type 92 HMG has a different  
propellant charge.



Diameter: 7.7 mm

Designation: Type 92 Ball Projectile

Color and Markings: Red or pink band on crimp

Projectile Length: 35.0 mm

Projectile Length With Fuze:

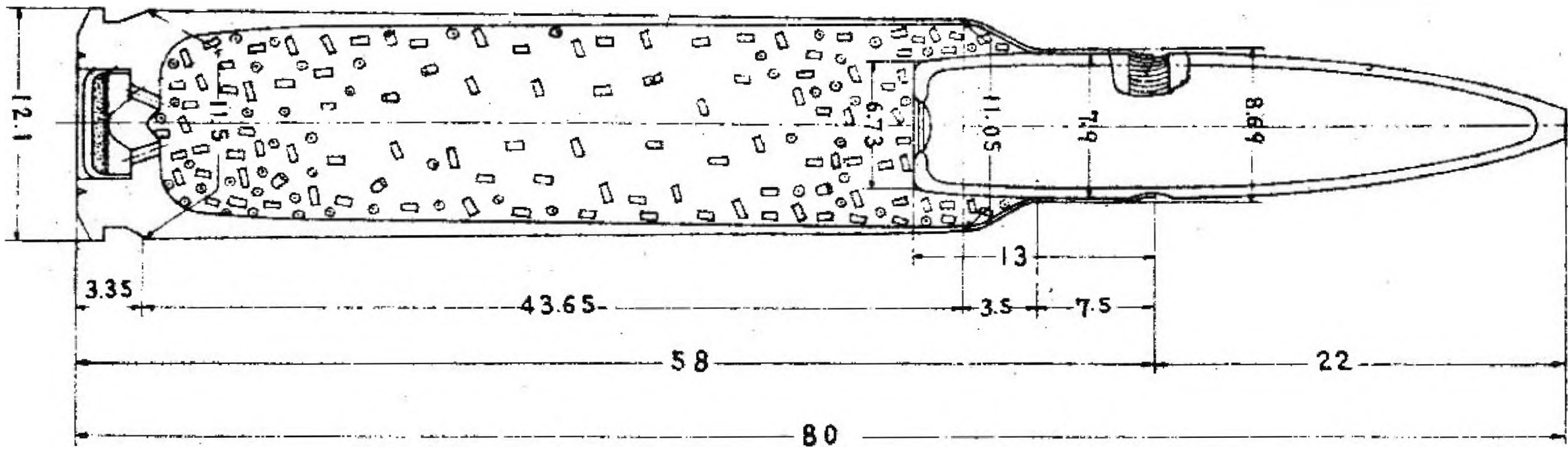
Projectile Weight: 13 gm

Weight and Type of Filling:

Fuzing:

Guns Used In:	Type 92 HMG	Type 89 Fixed MG
	Type 97 Tank HMG	Type 99 LMG
	Type 89 Flexible MG	Type 99 Rifle
	Type 89 Flexible	
	MG (Special)	

Remarks: Jacket - brass  
Core - Mk. 2 hard lead  
Equipment Class - 1



*Diameter:* 7.7 mm

*Designation:* Type 99 Ball Projectile

*Color and Markings:* Red band on crimp

*Projectile Length:* 31.0 mm

*Projectile Length With Fuze:*

*Projectile Weight:* 11.8 gm

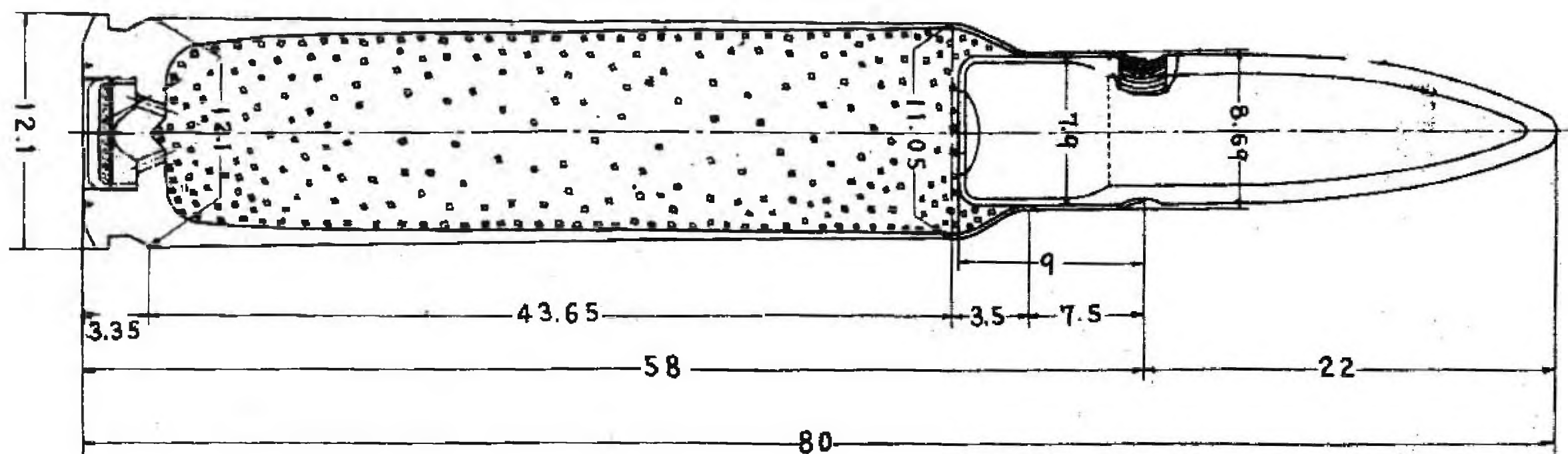
*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 99 Rifle  
Type 99 LMG

Type 92 HMG  
Type 97 Tank HMG

*Remarks:* Jacket - manganese brass  
Core - hard lead  
Equipment Class - 1





JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 7.7 mm

*Designation:* AP Projectile

*Color and Markings:* White painted on primer

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:* None

*Guns Used In:* Type 92 7.7 mm Flexible MG, Modif. 1

*Remarks:*

*Diameter:* 7.7 mm

*Designation:* Type 89 AP Projectile

*Color and Markings:* Black at crimp

*Projectile Length:* 35.0 mm

*Projectile Length With Fuze:*

*Projectile Weight:* 10.50 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 92 HMG

*Remarks:* Jacket - Mk. 2 brass  
Core - Mk. 3 steel for small arms ammunition  
Equipment Class - 1

JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 7.7 mm

*Designation:* Type 89 AP Projectile

*Color and Markings:* Black band on crimp

*Projectile Length:* 35.0 mm

*Projectile Length With Fuze:*

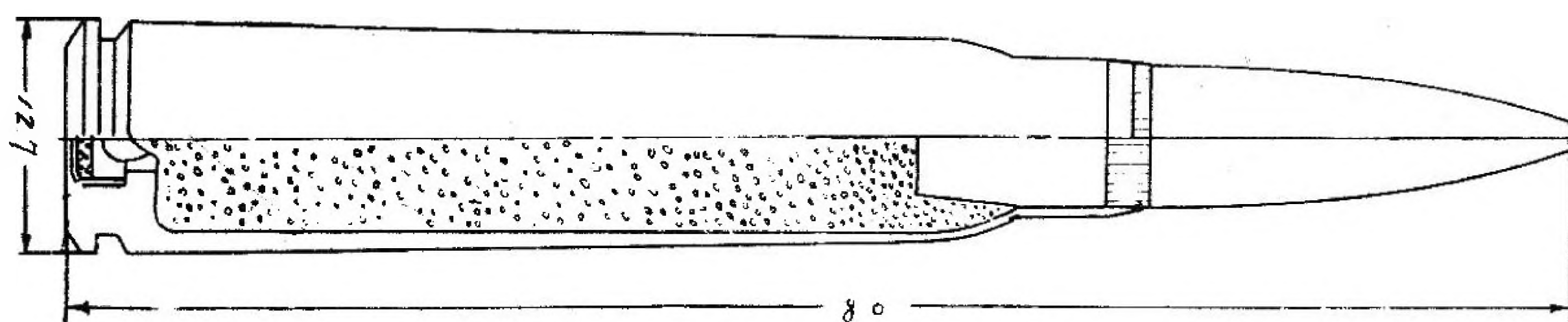
*Projectile Weight:* 10.3 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 89 Flexible MG  
Type 89 Flexible MG (Special)  
Type 89 Fixed MG

*Remarks:* Jacket - Mk. 2 brass  
Core - chilled steel  
Equipment Class - 2



Diameter: 7.7 mm

Designation: Type 92 AP Projectile

Color and Markings: Black band on crimp

Projectile Length: 35.0 mm

Projectile Length With Fuze:

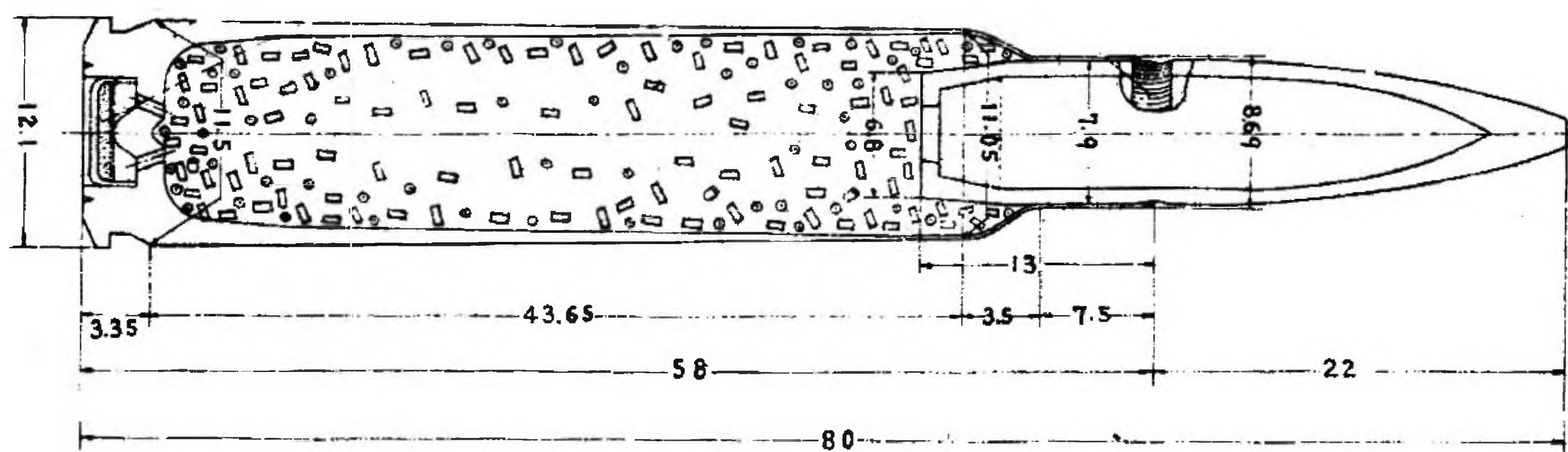
Projectile Weight: 10.5 gm

Weight and Type of Filling:

Fuzing:

Guns Used In:	Type 92 HMG	Type 89 Fixed MG
	Type 97 Tank HMG	Type 99 LMG
	Type 89 Flexible MG	Type 99 Rifle
	Type 89 Flexible	
	MG (Special)	

Remarks: Jacket - brass  
Core - Mk. 3 rifle steel  
Equipment Class - 1



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 7.7 mm

*Designation:* Tracer Projectile

*Color and Markings:* Red painted on primer

*Projectile Length:* 36 mm

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:* Tracer compound - .98 gm

*Fuzing:* None

*Guns Used In:* Type 92 7.7 mm Flexible MG, Modif. 1

*Remarks:* Jacket - cupro nickel  
Core - lead  
Burnout time - 2.6 seconds

*Diameter:* 7.7 mm

*Designation:* Type 89 Tracer Projectile

*Color and Markings:* Green at crimp

*Projectile Length:* 37.50 mm

*Projectile Length With Fuze:*

*Projectile Weight:* 10.10 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:*

*Remarks:* Jacket - Mk. 1 nickel alloy  
Core - Mk. 2 hard lead  
Equipment Class - 1



*Diameter:* 7.7 mm

*Designation:* Type 89 Tracer Projectile

*Color and Markings:* Green band on crimp

*Projectile Length:* 38.50 mm

*Projectile Length With Fuze:*

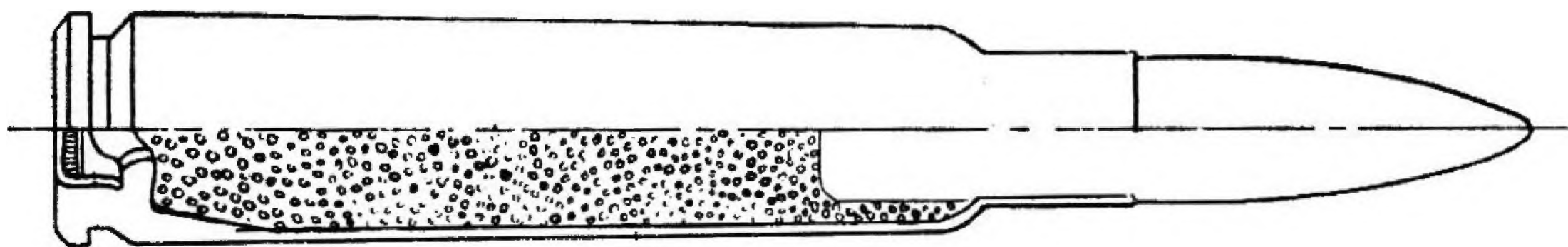
*Projectile Weight:* 11 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 89 Flexible MG  
Type 89 Flexible MG (Special)  
Type 89 Fixed MG

*Remarks:* Jacket - Mk. 1 nickel alloy  
Core - Mk. 2 hard lead  
Equipment Class - 2  
Tracer compound: barium peroxide 90%  
magnesium 10%



*Diameter:* 7.7 mm

*Designation:* Type 92 Tracer Projectile

*Color and Markings:* Green band on crimp

*Projectile Length:* 37.5 mm

*Projectile Length With Fuze:*

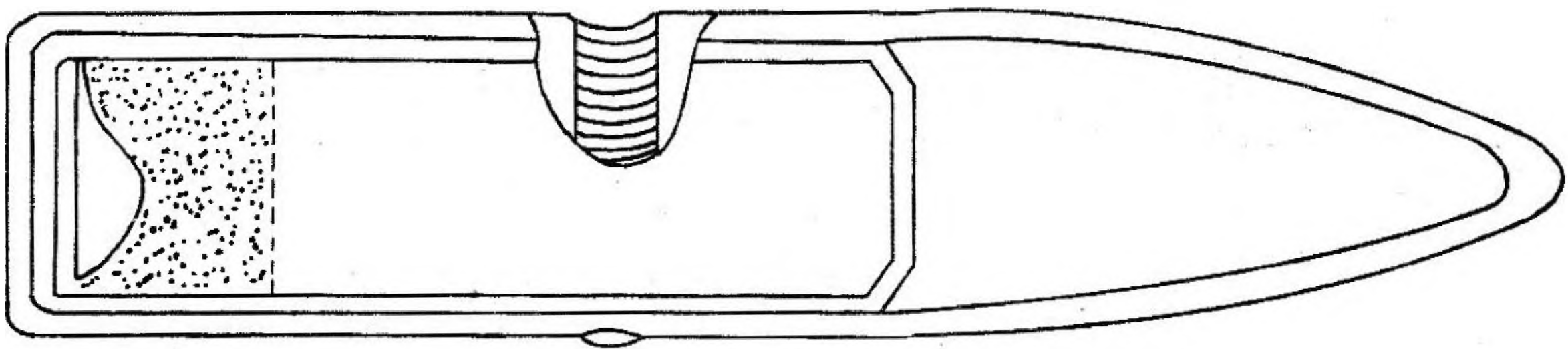
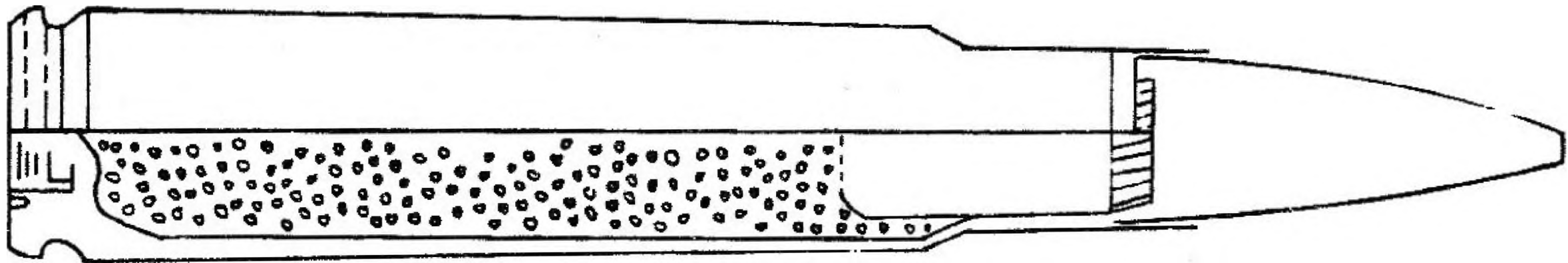
*Projectile Weight:* 10.1 gm

*Weight and Type of Filling:* Tracer compound - .8 gm  
Igniting compound - .4 gm

*Fuzing:*

<i>Guns Used In:</i>	Type 89 Flexible MG	Type 92 HMG
	Type 39 Flexible	Type 97 Tank HMG
	MG (Special)	Type 99 LMG
	Type 89 Fixed MG	Type 99 Rifle

*Remarks:* Jacket - manganese brass  
Core - hard lead  
Equipment Class - 1



*Diameter:* 7.7 mm

*Designation:* Incendiary Projectile, Model 1

*Color and Markings:* Green painted on primer

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:* W. P. - .61 gm

*Fuzing:* None

*Guns Used In:* Type 92 7.7 mm Flexible MG, Modif. 1

*Remarks:*

*Diameter:* 7.7 mm

*Designation:* Incendiary Projectile, Model 2

*Color and Markings:* Purple painted on primer

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:*

#1 Incendiary compound (cyclonite, PETN) - .24 gm

#2 Incendiary compound (cyclonite, aluminum) - .26 gm

*Fuzing:* None

*Guns Used In:* Type 92 7.7 mm Flexible MG, Modif. 1

*Remarks:*

*Diameter:* 7.7 mm

*Designation:* Type 89 Incendiary Projectile

*Color and Markings:* Red at crimp

*Projectile Length:* 37.50 mm

*Projectile Length With Fuze:*

*Projectile Weight:* 10.80 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 92 HMG

*Remarks:* Jacket - Mk. 1 nickel alloy  
Core - Mk. 2 hard lead  
Body - Mk. 1 nickel alloy  
Equipment Class - 1

*Diameter:* 7.7 mm

*Designation:* Type 89 Incendiary Projectile

*Color and Markings:* Red band on crimp

*Projectile Length:* 38.5 mm

*Projectile Length With Fuze:*

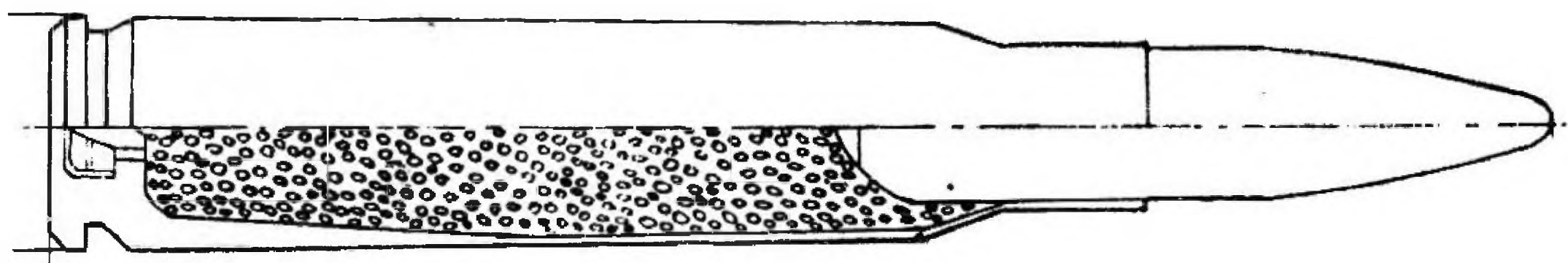
*Projectile Weight:* 11 gm

*Weight and Type of Filling:* W. P. - .95 gm

*Fuzing:*

*Guns Used In:* Type 89 Flexible MG  
Type 89 Flexible MG (Special)  
Type 89 Fixed MG

*Remarks:* Jacket - Mk. 1 gilding metal  
Core - hard lead  
Equipment Class - 2  
Length also given as 35.0 mm





*Diameter:* 7.7 mm

*Designation:* Type 92 Incendiary Projectile

*Color and Markings:* Red band on crimp

*Projectile Length:* 37.5 mm

*Projectile Length With Fuze:*

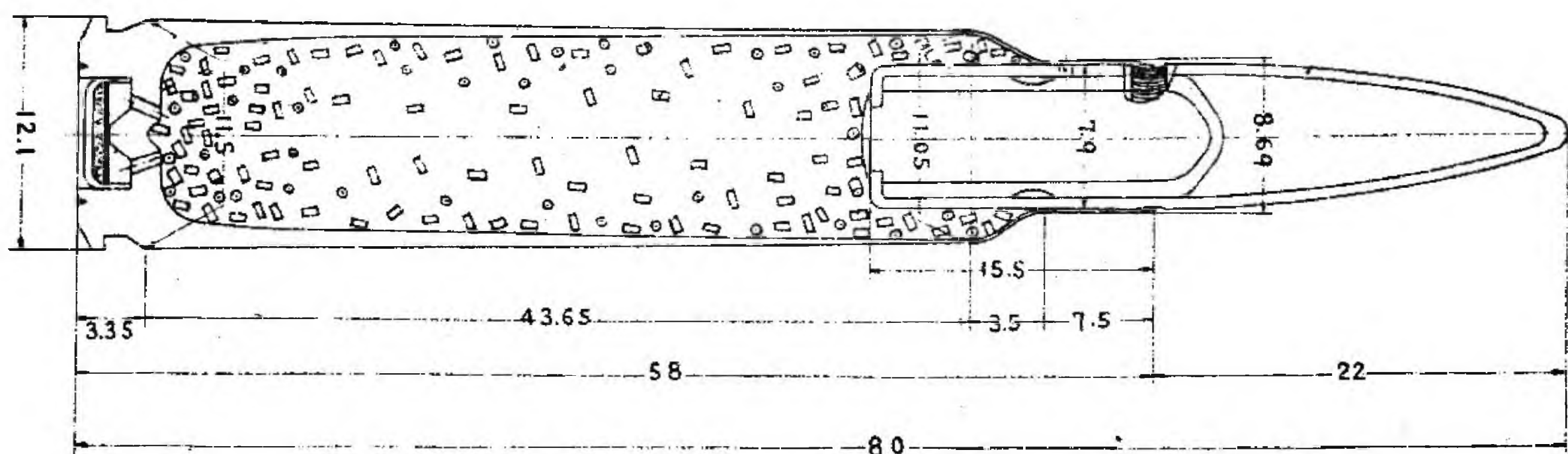
*Projectile Weight:* 10.7 gm

*Weight and Type of Filling:* W. P. - .7 gm

*Fuzing:*

<i>Guns Used In:</i>	Type 89 Flexible MG	Type 92 HMG
	Type 89 Flexible	Type 97 Tank HMG
	MG (Special)	Type 99 LMG
	Type 89 Fixed MG	Type 99 Rifle

*Remarks:* Jacket - manganese brass  
Core - hard lead  
Body - nickel  
Equipment Class - 1



*Diameter:* 7.9 mm

*Designation:* Ball Projectile

*Color and Markings:* Black paint on primer

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:* None

*Guns Used In:* Type 1 7.9 mm MG, Model 1

*Remarks:*

*Diameter:* 7.9 mm

*Designation:* Type 98 Ball Projectile

*Color and Markings:*

*Projectile Length:* 28.0 mm

*Projectile Length With Fuze:*

*Projectile Weight:* 10 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Czech (Bren Type) 7.92 mm LMG

*Remarks:* Jacket - brass  
Core - hard lead  
Equipment Class - 2

*Diameter: 7.9 mm*

*Designation: Type 1 Ball Projectile*

*Color and Markings:*

*Projectile Length: 35.3 mm*

*Projectile Length With Fuze:*

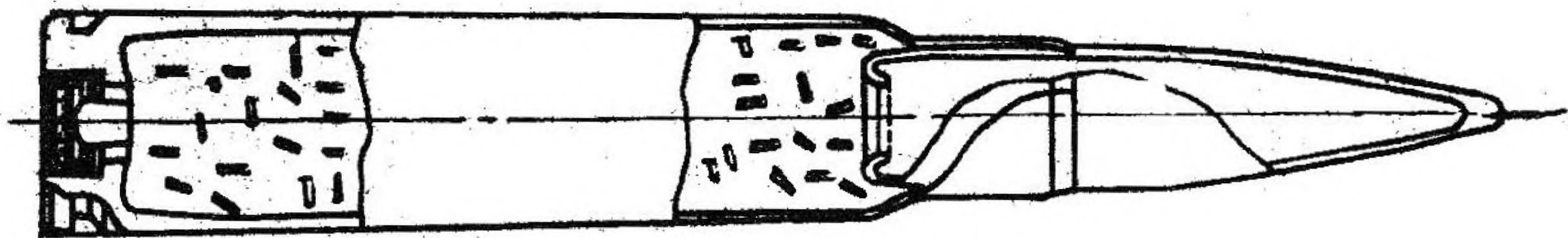
*Projectile Weight: 12.8 gm*

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In: Type 98 Fixed MG*

*Remarks: Jacket - gilding metal  
Core - hard lead  
Equipment Class - 1*



*Diameter:* 7.9 mm

*Designation:* AP Projectile

*Color and Markings:* Painted white on primer

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:* None

*Guns Used In:* Type 1 7.9 mm MG, Model 1

*Remarks:*

*Diameter:* 7.9 mm

*Designation:* Type 1 AP Projectile

*Color and Markings:* Black band at crimp

*Projectile Length:* 37.3 mm

*Projectile Length With Fuze:*

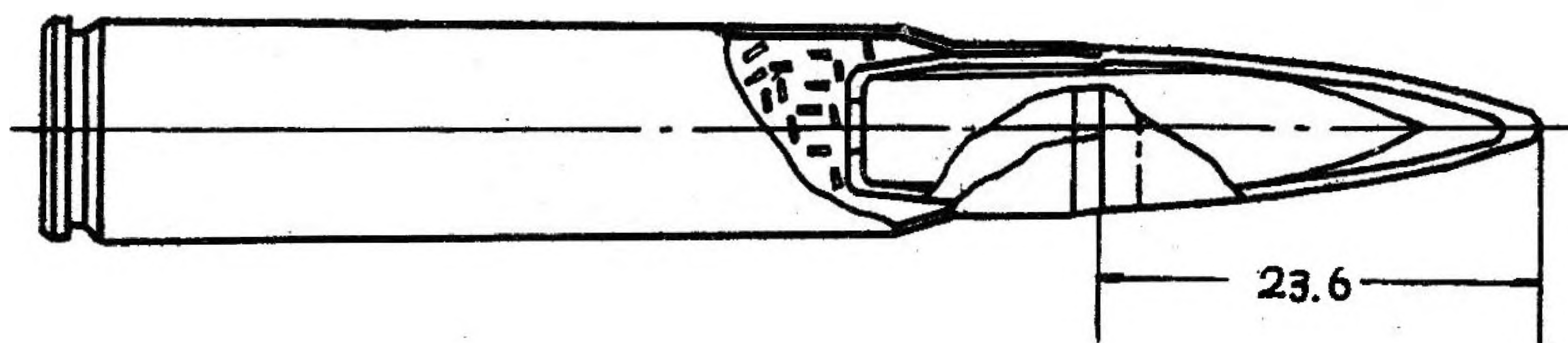
*Projectile Weight:* 11.5 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 98 Fixed MG

*Remarks:* Jacket - gilding metal  
Core - Class 3 rifle steel  
Equipment Class - 1





JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 7.9 mm

*Designation:* Tracer Projectile

*Color and Markings:* Red on primer

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:* Tracer compound - .6 gm

*Fuzing:* None

*Guns Used In:* Type 1 7.9 mm MG, Model 1

*Remarks:*

*Diameter:* 7.9 mm

*Designation:* Type 1 Incendiary Projectile

*Color and Markings:* Red band at crimp

*Projectile Length:* 37.3 mm

*Projectile Length With Fuze:*

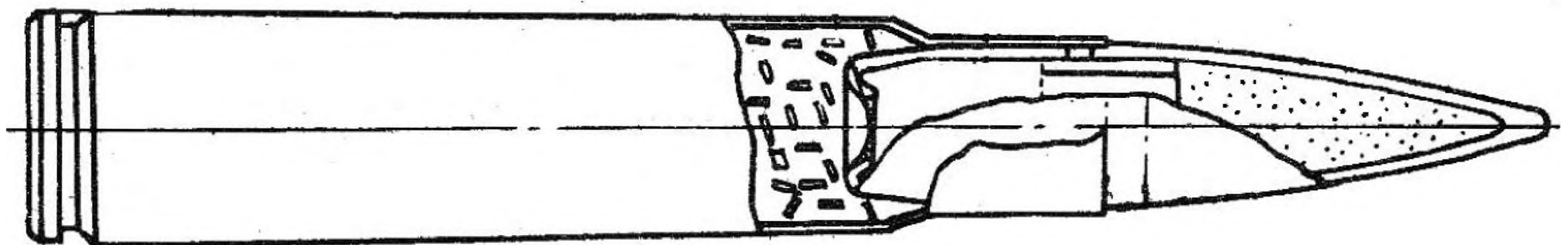
*Projectile Weight:* 9.68 gm

*Weight and Type of Filling:* W.P. - .73 gm

*Fuzing:*

*Guns Used In:* Type 98 Fixed MG

*Remarks:* Jacket - gilding metal  
Core - hard lead  
Equipment Class - 1



*Diameter:* 7.9 mm

*Designation:* Incendiary Projectile

*Color and Markings:* Painted green on primer

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:* W.P. - .65 gm

*Fuzing:* None

*Guns Used In:* Type 1 7.9 mm MG, Model 1

*Remarks:*

*Diameter:* 7.9 mm

*Designation:* Incendiary Projectile, Model 2

*Color and Markings:* Painted purple on primer

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:*

#1 Incendiary compound (Cyclonite, PETN) .26 gm

#2 Incendiary compound (Cyclonite, Aluminum) .70 gm

*Fuzing:* None

*Guns Used In:* Type 1 7.9 mm MG

*Remarks:*

*Diameter: 8 mm*

*Designation: 14th Year Type Pistol Ball Projectile*

*Color and Markings:*

*Projectile Length: 15.0 mm*

*Projectile Length With Fuze:*

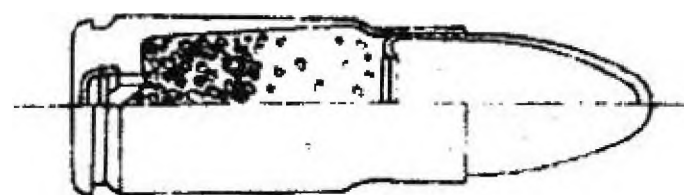
*Projectile Weight: 6.60 gm*

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In: 14th Year Type Pistol*  
*Type 100 Sub-MG*  
*Type 94 Pistol*

*Remarks: Jacket - manganese brass*  
*Core - hard lead*  
*Equipment Class - 1*



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 9 mm

*Designation:* Ball Projectile

*Color and Markings:*

*Projectile Length:* 16.0 mm

*Projectile Length With Fuze:*

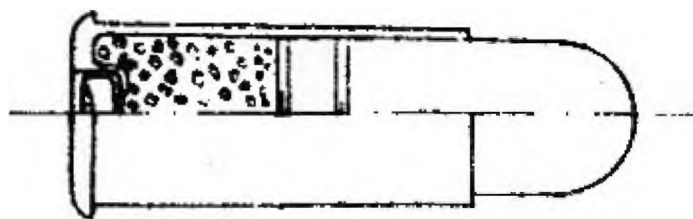
*Projectile Weight:* 9.80 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* 26th Year Type Pistol  
Smith and Wesson Pistol

*Remarks:* Jacket - hard lead  
Core - hard lead  
Equipment Class - 3



Diameter: 12.7 mm

Designation: Type 1 Ball Projectile

Color and Markings:

Projectile Length: 43 mm

Projectile Length With Fuze:

Projectile Weight: 36.0 gm

Weight and Type of Filling:

Fuzing:

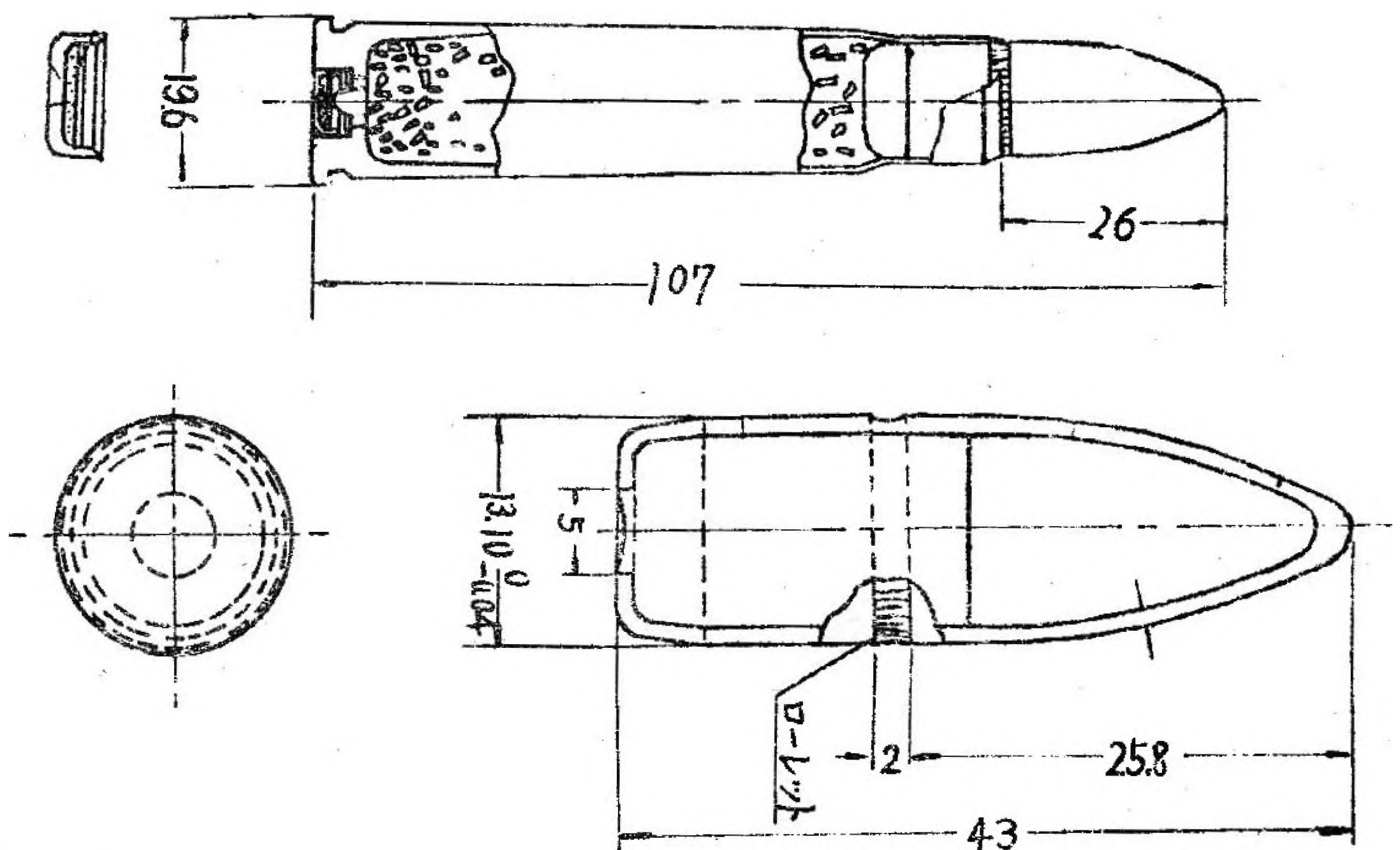
Guns Used In: 12.7 mm Aircraft MG (Browning Type)

Remarks: Jacket - hard lead

Core - aluminum

Percussion cap: mercury fulminate - 6  
potassium chlorate - 6  
antimony trisulphate - 4 } .07 gm

Equipment Class - 1





*Diameter:* 12.7 mm

*Designation:* Type 1 AP-T Projectile

*Color and Markings:* Black band at crimp

*Projectile Length:* 44 mm

*Projectile Length With Fuze:*

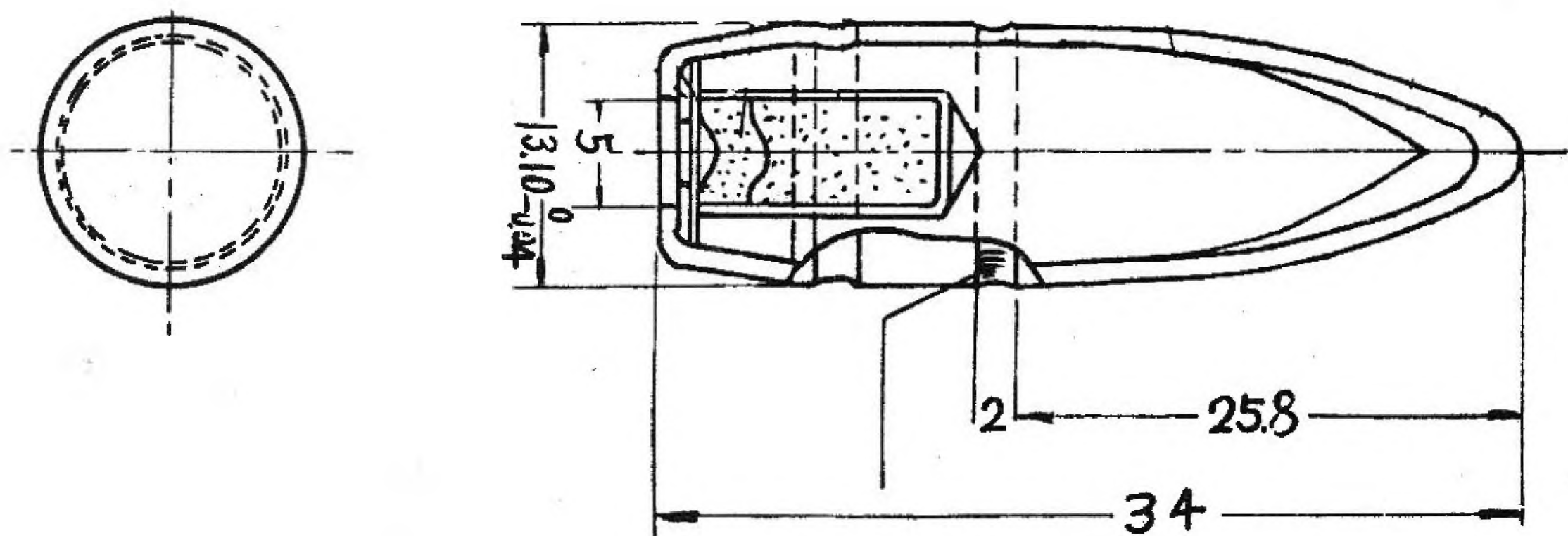
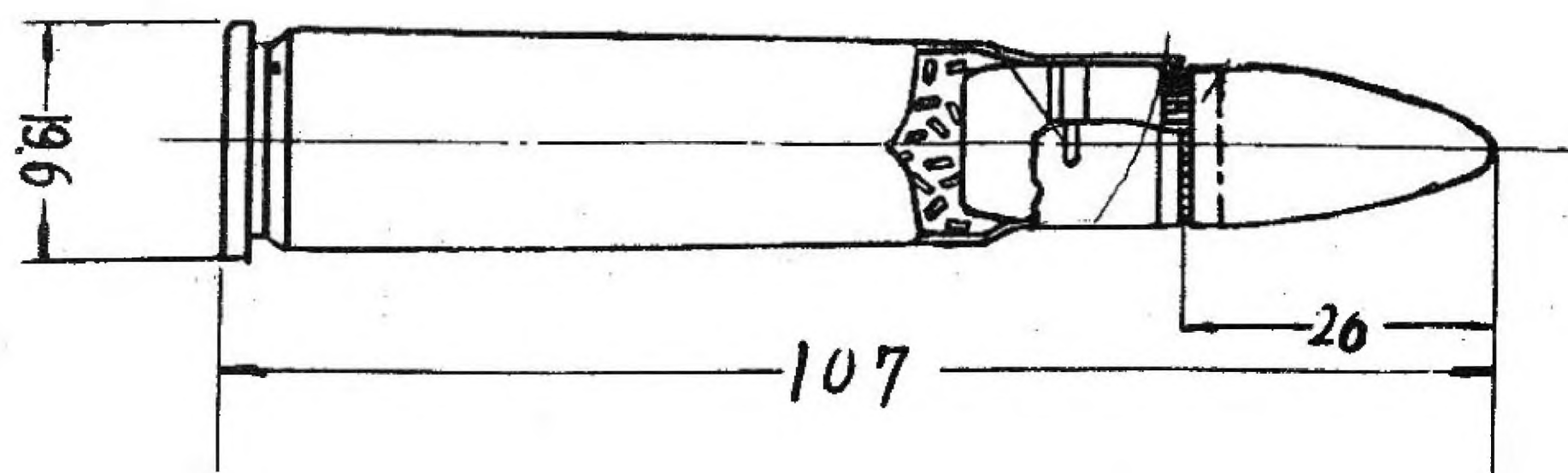
*Projectile Weight:* 36.5 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* 12.7 mm Aircraft MG (Browning Type)

*Remarks:* Jacket - Mk. 12 brass      Equipment Class - 1  
Core - Mk. 1 hard lead  
Bullet - Mk. 3 rifle steel



JAPANESE PROJECTILES.  
CINCPAC-CINCPHA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

Diameter: 12.7 mm

Designation: Type 1 Tracer Projectile

Color and Markings: Green band at crimp

Projectile Length: 44 mm

Projectile Length With Fuze:

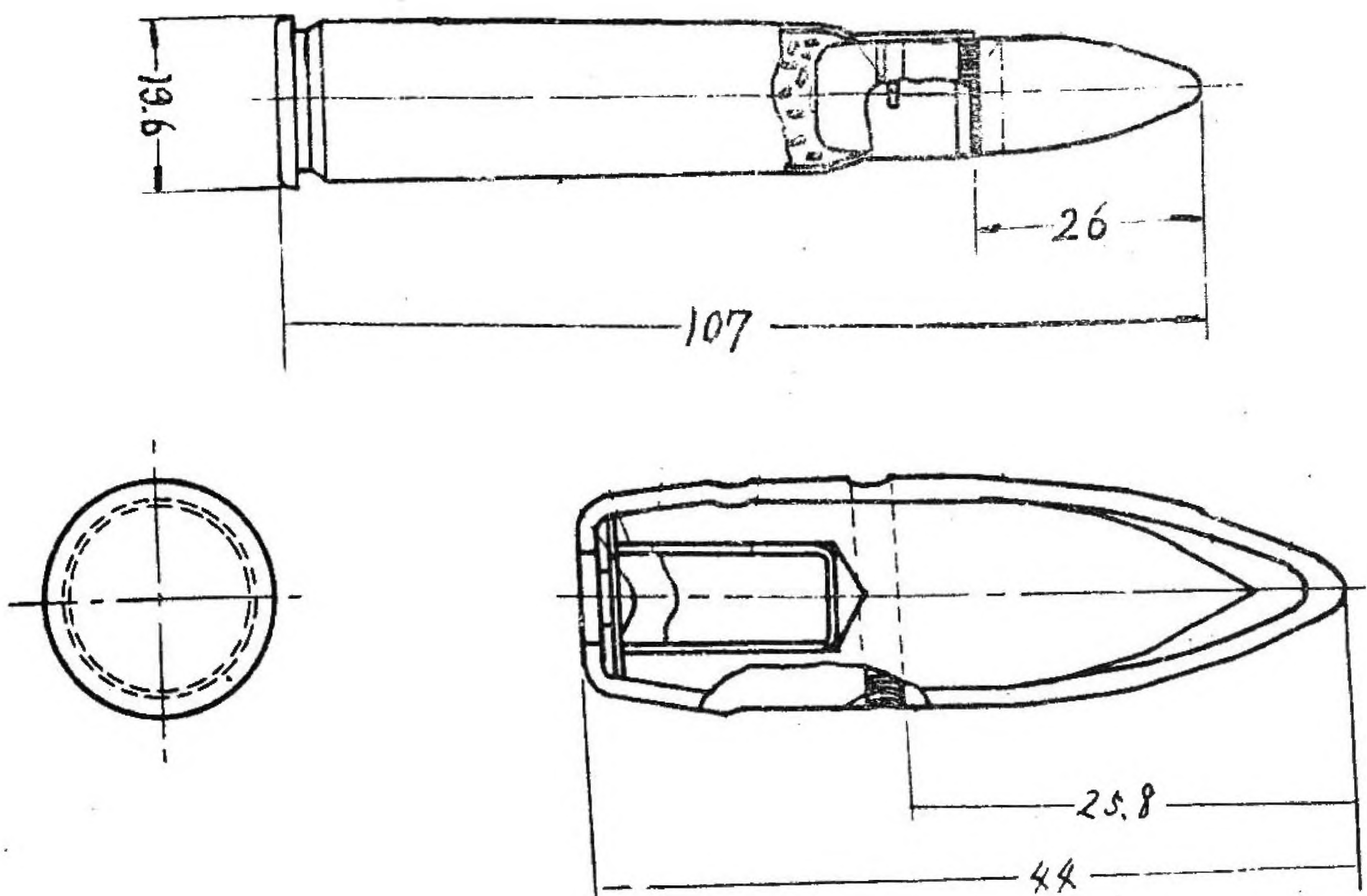
Projectile Weight: 36.5 gm

Weight and Type of Filling: Tracer compound - .7 gm  
Igniting compound - .3 gm

Fuzing:

Guns Used In: 12.7 mm Aircraft MG (Browning Type)

Remarks: Jacket - Mk. 12 brass  
Core - Mk. 2 hard lead  
Bullet - Mk. 3 bar steel  
Equipment Class - 1



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 13 mm

*Designation:* Ball Projectile

*Color and Markings:* Black painted on primer

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 3 13 mm MG

*Remarks:*

*Diameter:* 13 mm

*Designation:* Practice Projectile

*Color and Markings:* Black

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:* None

*Guns Used In:* Type 2 13 mm MG

*Remarks:*

JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 13 mm

*Designation:* Type 92 Ball Projectile

*Color and Markings:*

*Projectile Length:* 61.7 mm

*Projectile Length With Fuze:*

*Projectile Weight:* 52 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 92 Vehicle-mounted MG  
Type 93 AA MG  
Type 96 MG

*Remarks:* Jacket - gilding metal  
Core - steel  
Nose - hard lead  
Equipment Class - 1

*Diameter:* 13 mm

*Designation:* Type 92 Cupro-Nickel Jacketed Projectile

*Color and Markings:*

*Projectile Length:* 61.7 mm

*Projectile Length With Fuze:*

*Projectile Weight:* 49 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 92 Vehicle-mounted MG  
Type 93 AA MG

*Remarks:* Steel bullet  
Equipment Class - 1

*Diameter:* 13 mm

*Designation:* Tracer Projectile

*Color and Markings:* Red

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:* Tracer compound - .6 gm

*Fuzing:* None

*Guns Used In:* Type 2 13 mm MG

*Remarks:* Tracer color - yellow

*Diameter:* 13 mm

*Designation:* Tracer Projectile

*Color and Markings:* Red painted on primer

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:* Tracer compound - 2 gm

*Fuzing:* None

*Guns Used In:* Type 3 13 mm MG

*Remarks:* Tracer color - yellow

JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 13 mm

*Designation:* Type 92 Tracer Projectile

*Color and Markings:* 3 mm green band on crimp

*Projectile Length:* 61.7 mm

*Projectile Length With Fuze:*

*Projectile Weight:* 51 gm

*Weight and Type of Filling:* Tracer compound - 2.2 gm

*Fuzing:*

*Guns Used In:* Type 92 Vehicle-mounted MG  
Type 93 AA MG  
Type 96 MG

*Remarks:* Jacket - gilding metal  
Core - steel  
Nose - hard lead  
Equipment Class - 1  
Burnout time - 3 seconds

*Diameter:* 13 mm

*Designation:* AP-T Projectile

*Color and Markings:* White

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:* Tracer compound - 1.0 gm

*Fuzing:* None

*Guns Used In:* Type ~ 13 mm MG

*Remarks:*



*Diameter:* 13 mm

*Designation:* AP Projectile

*Color and Markings:* White painted on primer

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:* None

*Guns Used In:* Type 3 13 mm MG

*Remarks:*

*Diameter:* 13 mm

*Designation:* Type 92 AP Projectile

*Color and Markings:* 3 mm black band on crimp

*Projectile Length:* 61.7 mm

*Projectile Length With Fuze:*

*Projectile Weight:* 52 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 92 Vehicle-mounted MG  
Type 93 AA MG  
Type 96 MG

*Remarks:* Jacket - gilding metal  
Core - rifle steel  
Nose - hard lead  
Equipment Class - 1

*Diameter: 13 mm*

*Designation: Incendiary Projectile, Model 1*

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

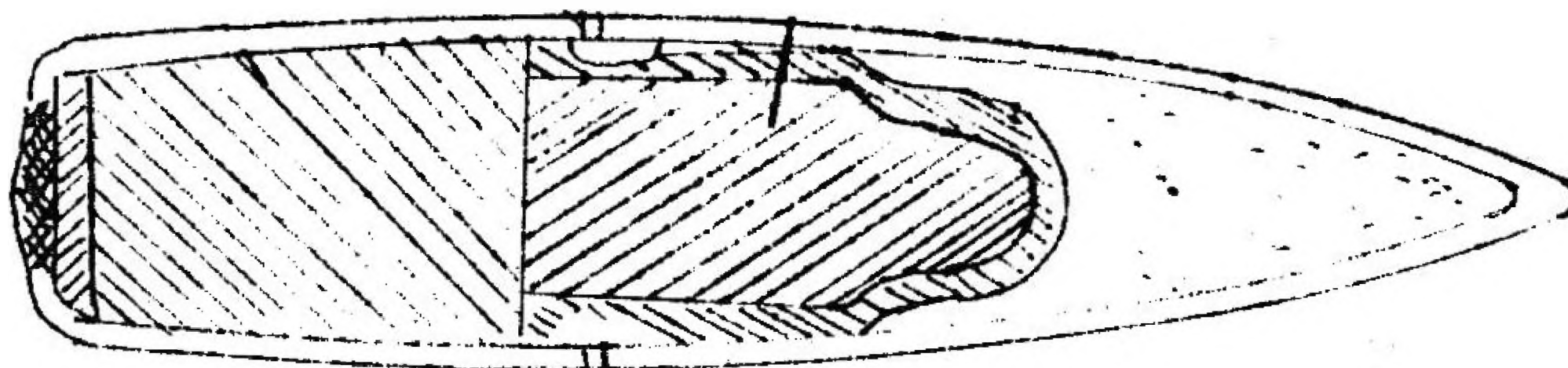
*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:*

*Remarks:*



*Diameter:* 13 mm

*Designation:* Incendiary Projectile, Model 2

*Color and Markings:* Purple

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:*

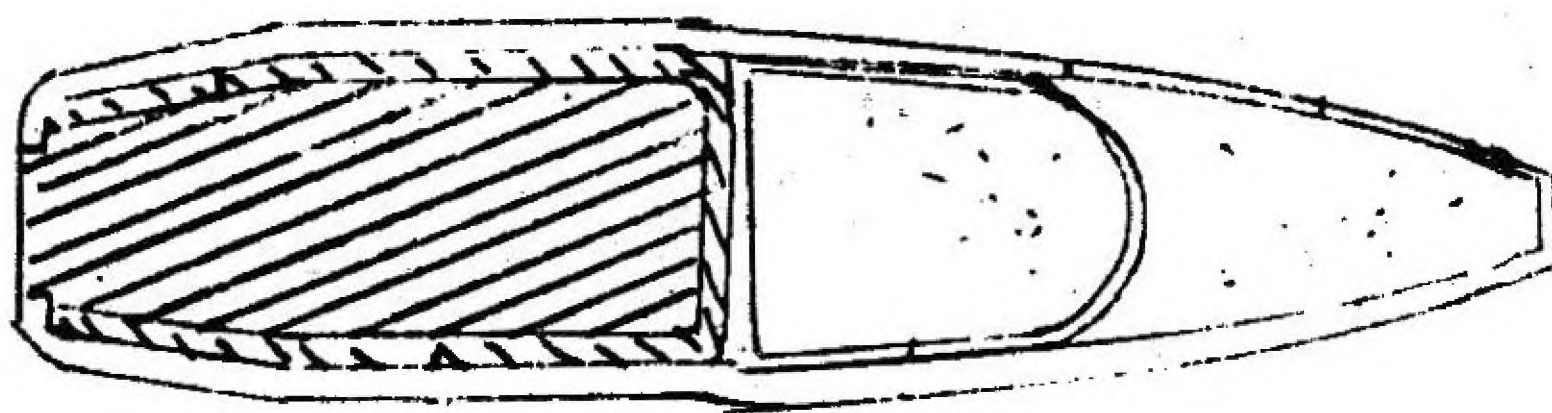
#1 Incendiary Compound (Cyclonite, PETN) 1.0 gm

#2 Incendiary Compound (Cyclonite, Aluminum) 1.3 gm

*Fuzing:* None

*Guns Used In:* Type 3 13 mm MG

*Remarks:*



*Diameter: 13 mm*

*Designation: Incendiary Projectile, Model 3, Modif 3*

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

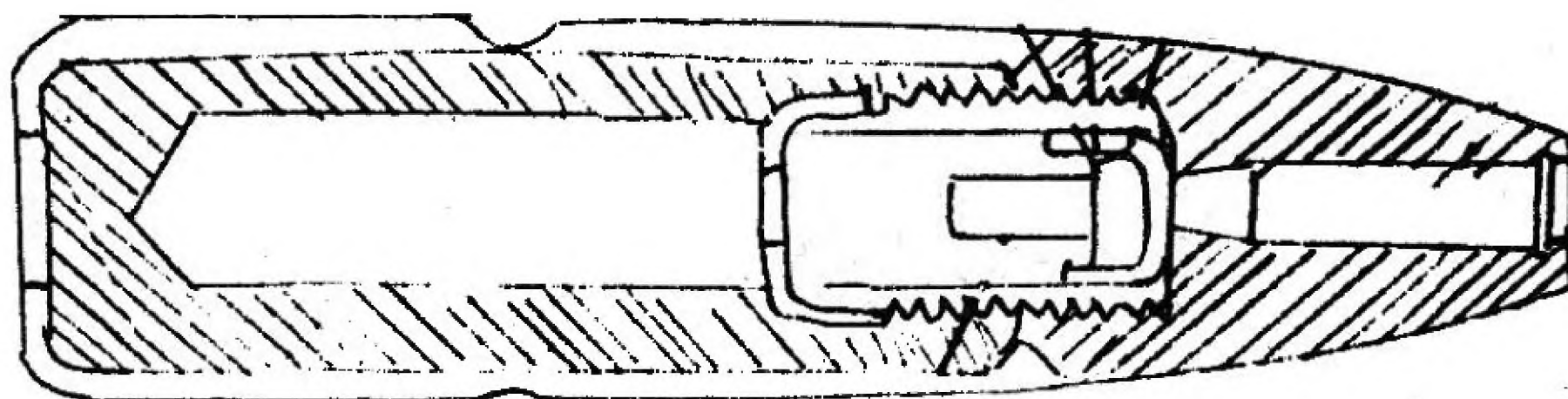
*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:*

*Remarks:*



*Diameter:* 13 mm

*Designation:* Incendiary Projectile, Model 3, Modif 4

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

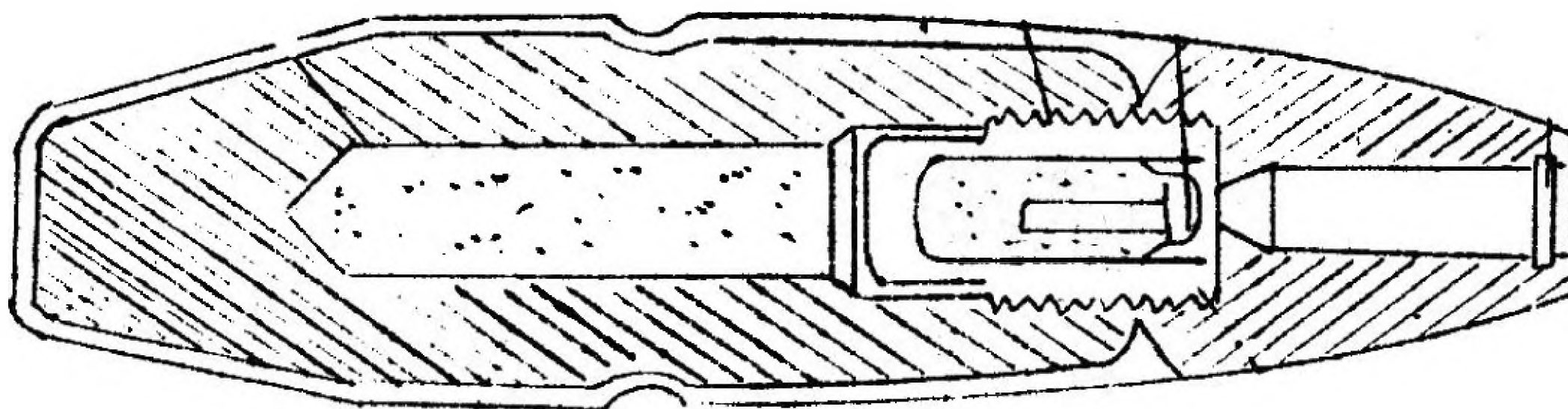
*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:*

*Remarks:*



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 13 mm

*Designation:* Type 92 Incendiary Projectile

*Color and Markings:* 3 mm red band on crimp

*Projectile Length:* 61.7 mm

*Projectile Length With Fuze:*

*Projectile Weight:* 51.5 gm

*Weight and Type of Filling:*

*Fuzing:* 13 mm MG

*Guns Used In:* Type 92 Vehicle-mounted MG  
Type 93 AA MG  
Type 96 MG

*Remarks:* Jacket - gilding metal  
Core - rifle steel  
Nose - hard lead  
Equipment Class - 1

*Diameter:* 13 mm

*Designation:* HE-I Projectile

*Color and Markings:* Yellow

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:* W.P. - 1.2 gm

*Fuzing:* Without striker

*Guns Used In:* Type 2 13 mm MG

*Remarks:*



*Diameter:* 13 mm

*Designation:* HE Projectile

*Color and Markings:* Rust color

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:* Pentolite Mixture - 1.7 gm

*Fuzing:* Percussion

*Guns Used In:* Type 2 13 mm MG

*Remarks:*

*Diameter:* 20 mm

*Designation:* Type 2 Substitute HE Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

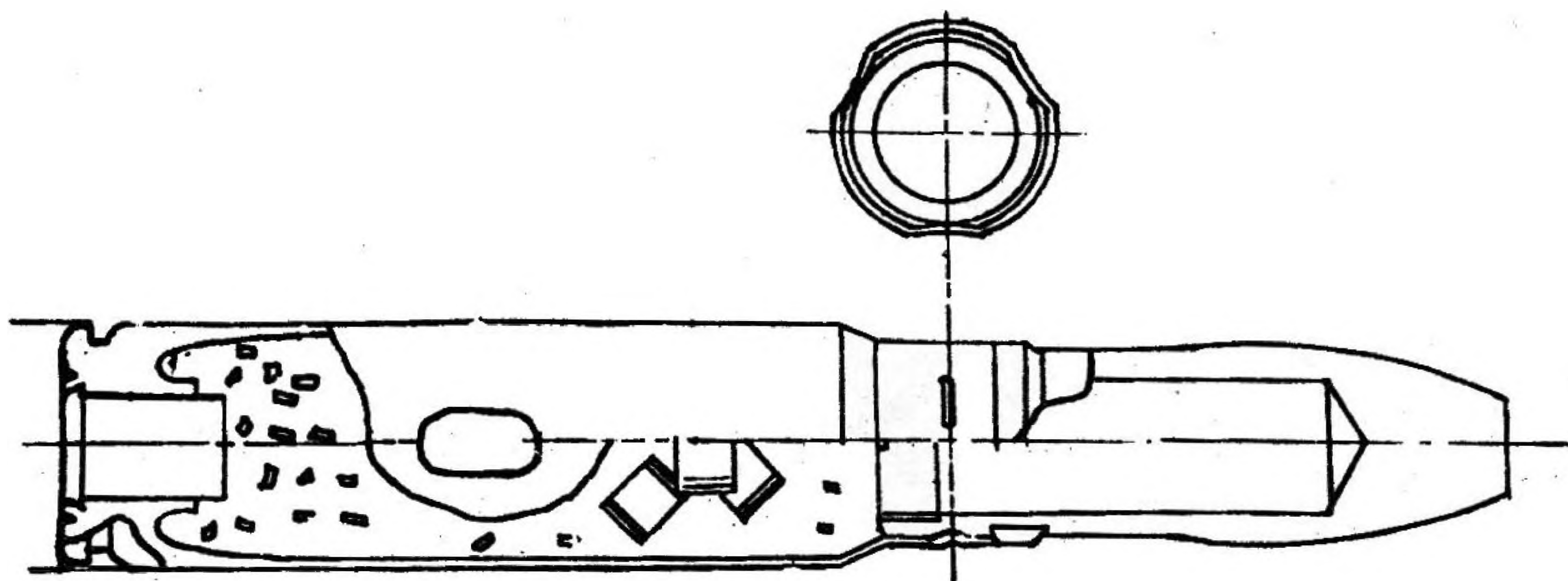
*Projectile Weight:* 84.5 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* HO-5 Automatic Cannon

*Remarks:* Equipment Class - 4



*Diameter:* 20 mm

*Designation:* Type 2 Substitute HE-T Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

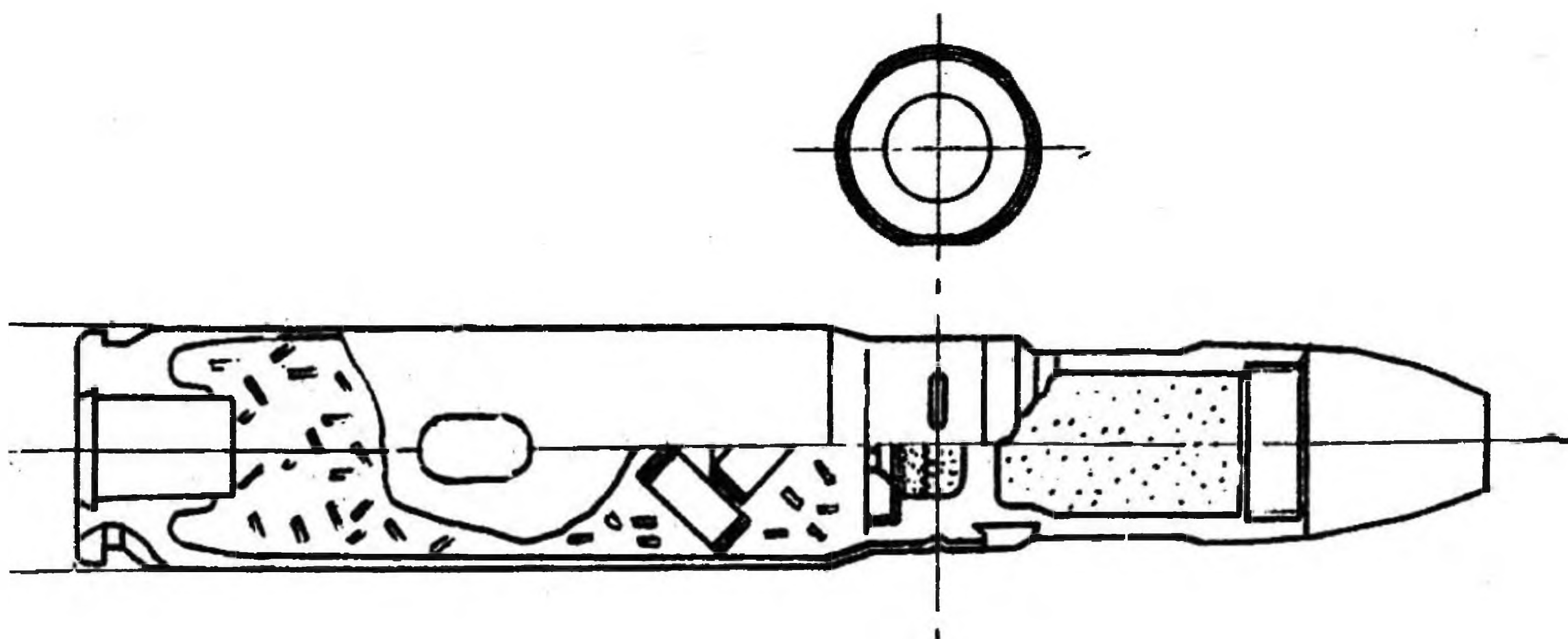
*Projectile Weight:* 90.0 gm

*Weight and Type of Filling:* Sand and paraffin - 5.0 gm  
Tracer compound - 1.2 gm  
Igniting compound - 1.0 gm

*Fuzing:* Dummy (modeled after the Type 2 Small  
Instantaneous Fuze)

*Guns Used In:* HO-5 Automatic Cannon

*Remarks:* Equipment Class - 4



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 20 mm

*Designation:* Type 99 Practice Projectile

*Color and Markings:* Black

*Projectile Length:* 82.0 mm

*Projectile Length With Fuze:*

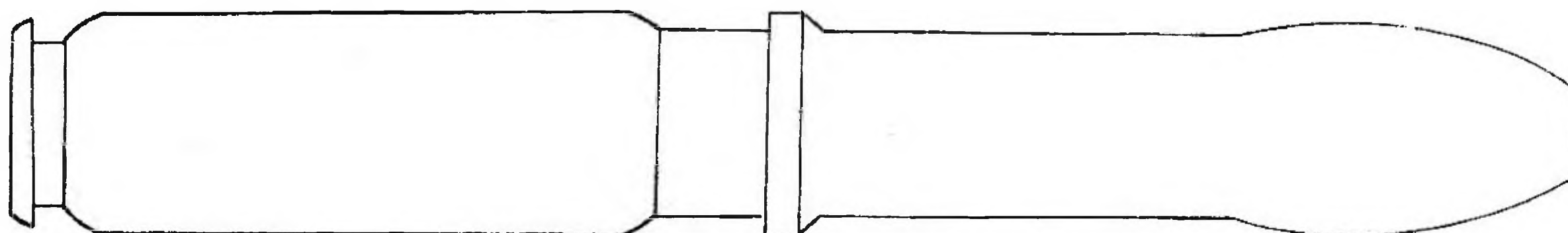
*Projectile Weight:* 123 gm

*Weight and Type of Filling:*

*Fuzing:* None

*Guns Used In:* Type 99 Mk. 1 Automatic Cannon  
Type 99 Mk. 2 Automatic Cannon

*Remarks:*



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 20 mm

*Designation:* Type 94 Substitute HE Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 123.4 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 94 Flexible Automatic Cannon

*Remarks:* Equipment Class - 4



*Diameter:* 20 mm

*Designation:* Type 97 Substitute AP Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 162 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 97 Automatic Gun

*Remarks:* Equipment Class - 4



Diameter: 20 mm

Designation: Type 97 Substitute AP-T Projectile

Color and Markings:

Projectile Length:

Projectile Length With Fuze:

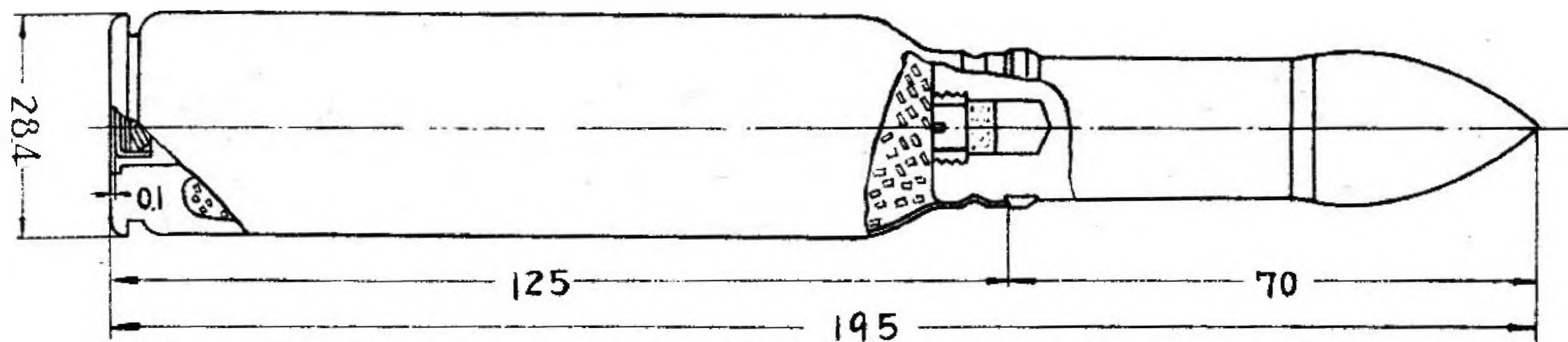
Projectile Weight: 162 gm

Weight and Type of Filling: Tracer compound - 7 gm  
Igniting compound - 4 gm

Fuzing: Type 100 Small Instantaneous

Guns Used In: Type 97 Automatic Gun  
Type 98 AA/AT Automatic Cannon

Remarks:



*Diameter:* 20 mm

*Designation:* Type 100 Substitute AP-T Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 160 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 98 AA/AT Automatic Cannon

*Remarks:* Equipment Class - 4

*Diameter:* 20 mm

*Designation:* Type 94 Substitute Tracer Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

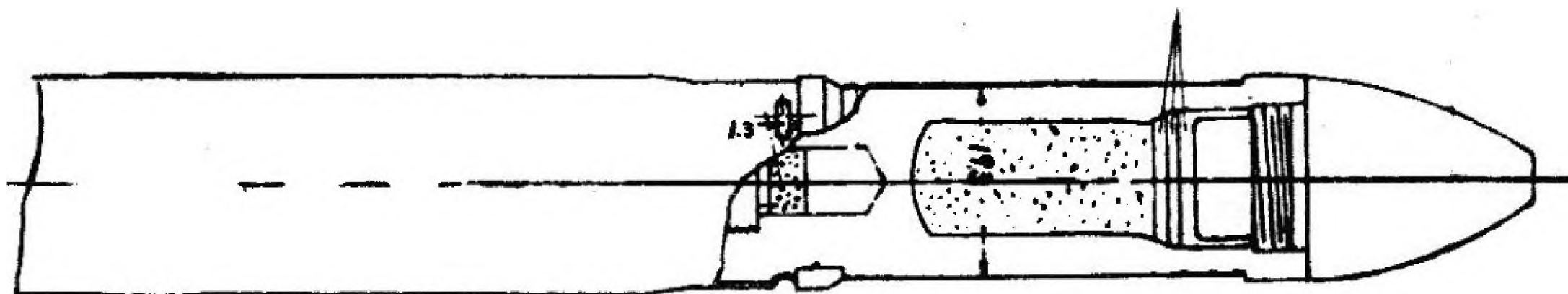
*Projectile Weight:* 138.2 gm

*Weight and Type of Filling:* Sand - 3.1 gm  
Igniting compound  
Tracer compound - 1.6 gm

*Fuzing:* Dummy (modeled after Type 93 Small  
Instantaneous Fuze)

*Guns Used In:* Type 94 Flexible Automatic Cannon

*Remarks:* Equipment Class - 4



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 20 mm

*Designation:* Type 100 Substitute HE Projectile  
w/Self-destroying Tracer

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 132 gm

*Weight and Type of Filling:* Igniting compound - .8 gm  
SHOUYAKU - 4.6 gm Booster - .8 gm  
Tracer compound - 3.0 gm

*Fuzing:* Type 100 Small Instantaneous

*Guns Used In:* Type 97 Automatic Gun  
Type 98 AA/AT Automatic Cannon

*Remarks:* Filler also given as fine grain powder  
Equipment Class - 4

*Diameter:* 20 mm

*Designation:* Type 94 Tracer Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 138 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 94 Flexible Automatic Cannon

*Remarks:*

*Diameter:* 20 mm

*Designation:* Type 99 Tracer Projectile, Modif. 2

*Color and Markings:* Red with two white stripes

*Projectile Length:* 82.0 mm

*Projectile Length With Fuze:*

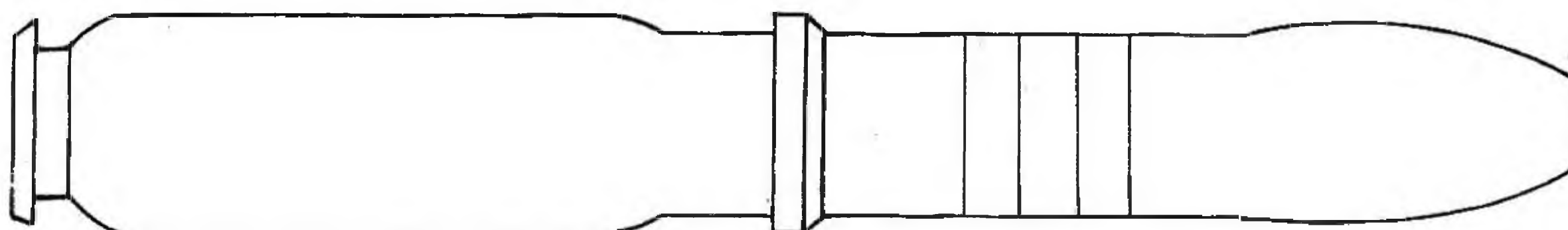
*Projectile Weight:* 128 gm

*Weight and Type of Filling:* Tracer Compound - 5.8 gm

*Fuzing:* None

*Guns Used In:* Type 99 Mk. 1 Automatic Cannon  
Type 99 Mk. 2 Automatic Cannon

*Remarks:*



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 20 mm

*Designation:* Type 99 Tracer Projectile, Modif. 3

*Color and Markings:* Red with three white stripes

*Projectile Length:* 82.0 mm

*Projectile Length With Fuze:*

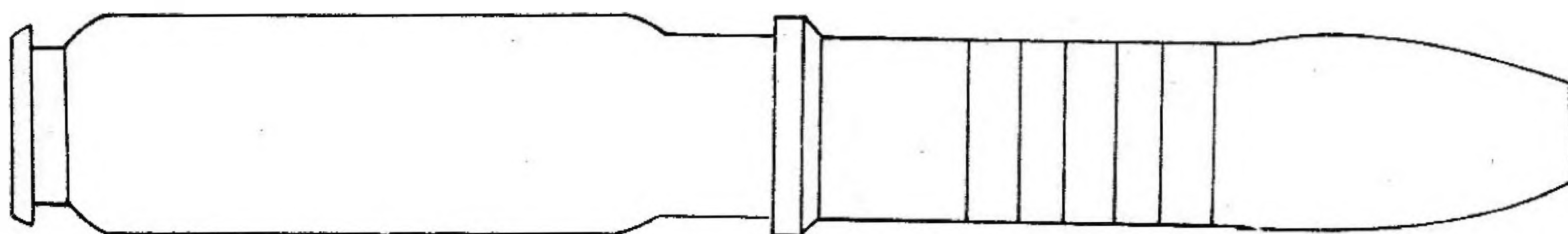
*Projectile Weight:* 128 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 99 Mk. 1 Automatic Cannon  
Type 99 Mk. 2 Automatic Cannon

*Remarks:*





*Diameter:* 20 mm

*Designation:* Type 2 AP-T Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

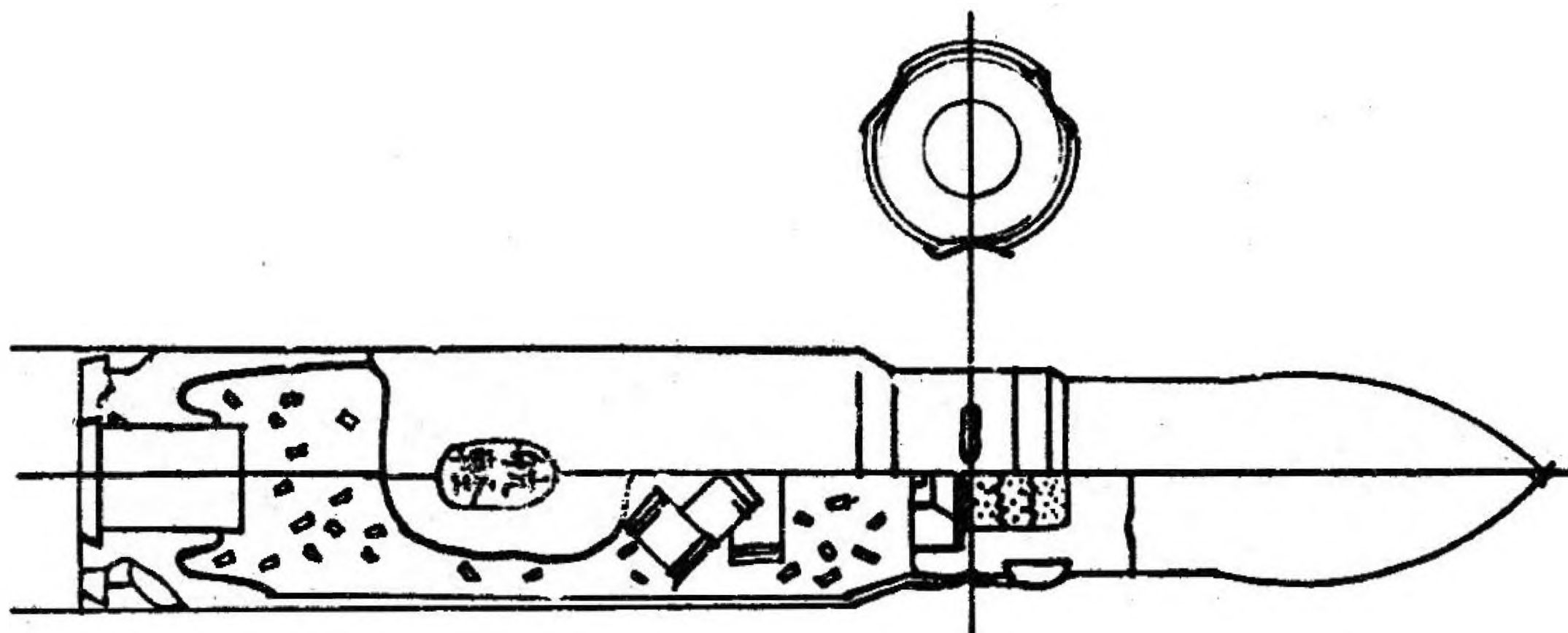
*Projectile Weight:* 123.2 gm

*Weight and Type of Filling:* Tracer compound - 1.2 gm  
Igniting compound - 1.0 gm

*Fuzing:*

*Guns Used In:* HO-5 Automatic Cannon

*Remarks:* Equipment Class - 1



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 20 mm

*Designation:* Type 97 AP-T Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

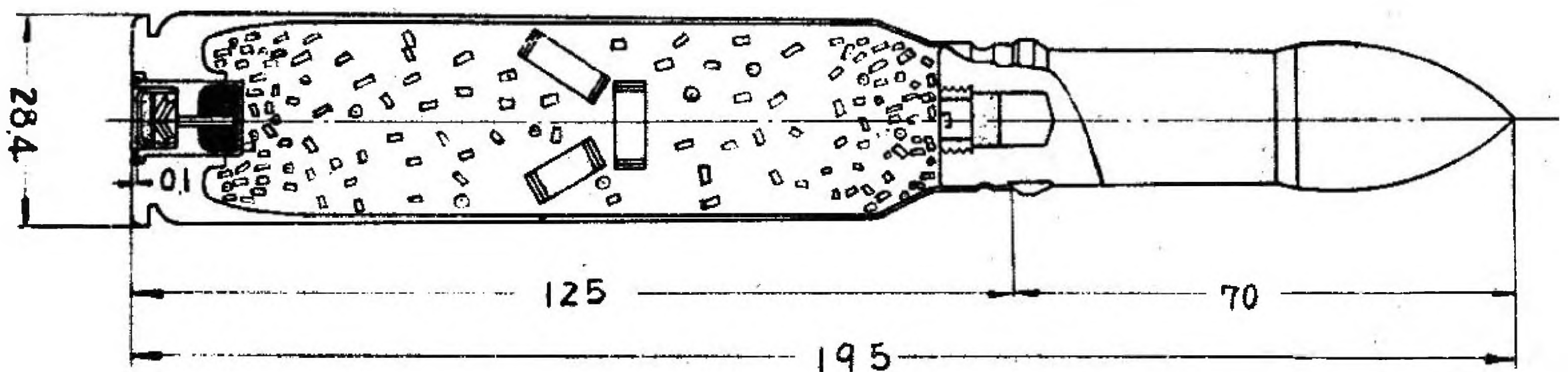
*Projectile Weight:* 162 gm

*Weight and Type of Filling:* Tracer compound - 7 gm  
Igniting compound - 4 gm

*Fuzing:* Type 100 Small Instantaneous

*Guns Used In:* Type 97 Automatic Gun  
Type 98 AA/AT Automatic Cannon

*Remarks:*



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 20 mm

*Designation:* Type 100 AP-T Projectile

*Color and Markings:*

*Projectile Length:* 80.5 mm

*Projectile Length With Fuze:*

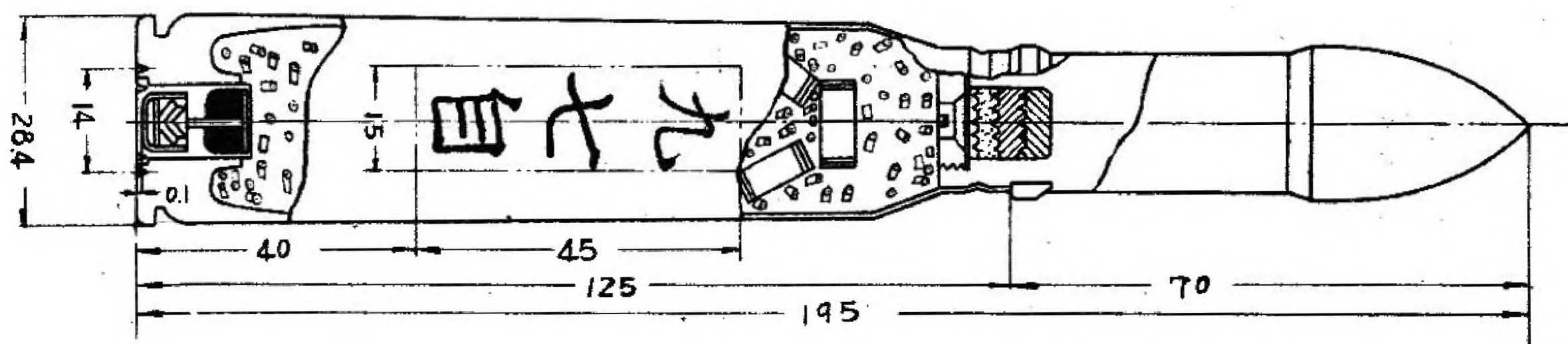
*Projectile Weight:* 132 gm

*Weight and Type of Filling:* Tracer compound - 17 gm  
Igniting compound - 6 gm

*Fuzing:* Type 100 Small Instantaneous

*Guns Used In:* Type 97 Automatic Gun  
Type 98 AA/AT Automatic Cannon

*Remarks:* Tracer burnout time - 5.2 seconds  
The total weight is also given as 160 gm  
Equipment Class - 1



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 20 mm

*Designation:* Type 94 HE Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 129.4 gm

*Weight and Type of Filling:* MEIYAKU (pressed) - 5.4 gm

*Fuzing:* Type 93 Small Instantaneous

*Guns Used In:* Type 94 Flexible Automatic Cannon

*Remarks:* Equipment Class - 1



*Diameter:* 20 mm

*Designation:* Type 99 HE Projectile, Modif. 2

*Color and Markings:* Rust color with two white stripes

*Projectile Length:* 82.0 mm

*Projectile Length With Fuze:*

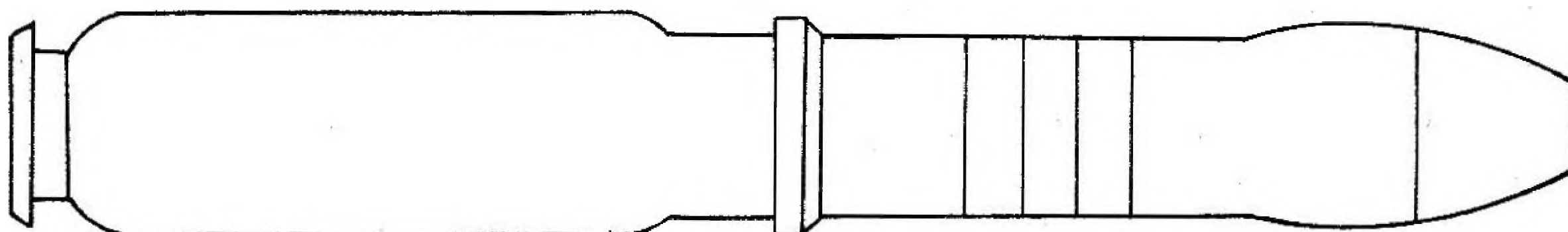
*Projectile Weight:* 128 gm

*Weight and Type of Filling:* Pentolite - 10 gm

*Fuzing:* Model 2 (rotor)

*Guns Used In:* Type 99 Mk. 1 Automatic Cannon  
Type 99 Mk. 2 Automatic Cannon

*Remarks:*



*Diameter:* 20 mm

*Designation:* Type 2 HE Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

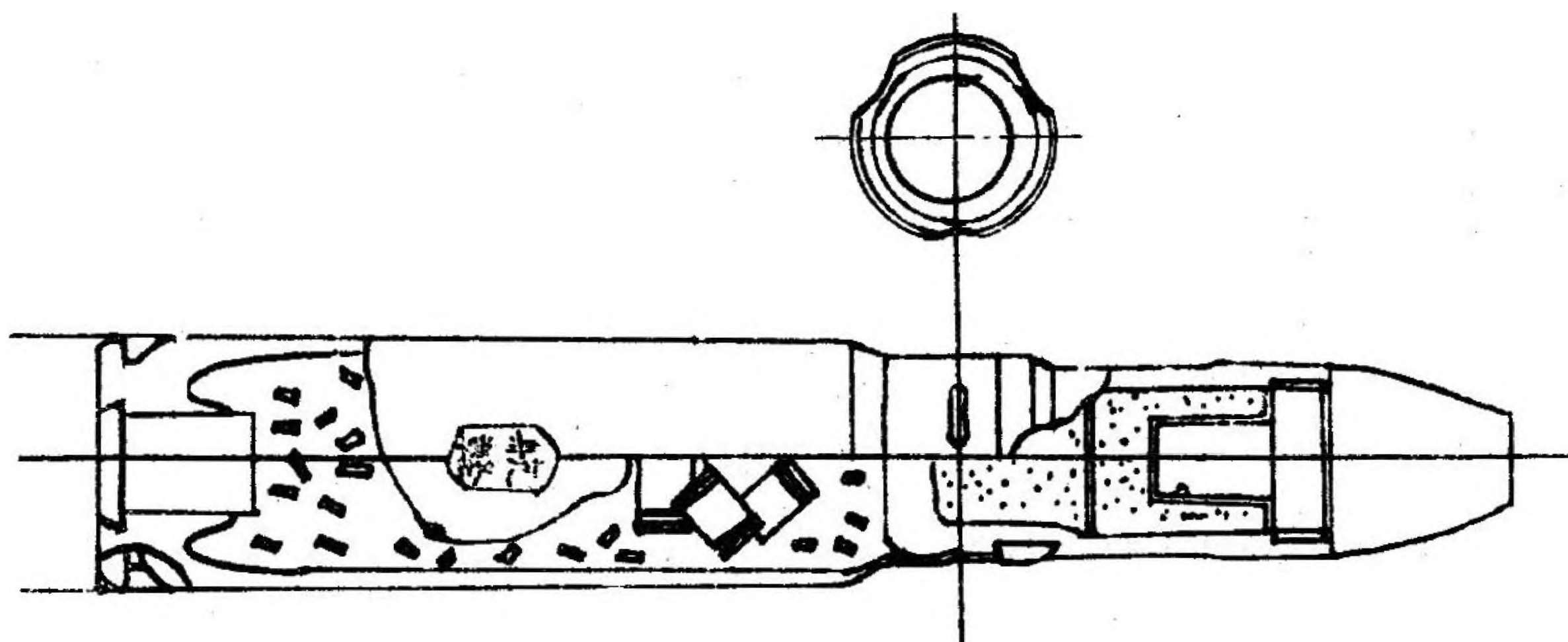
*Projectile Weight:* 84.3 gm

*Weight and Type of Filling:* SHOUYAKU - 3.4 gm  
Incendiary compound - 3.4 gm

*Fuzing:* Type 2 Small Instantaneous

*Guns Used In:* HO-5 Automatic Cannon

*Remarks:* Equipment Class - 1





JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 20 mm

*Designation:* Type 99 AP-HE Projectile

*Color and Markings:* White

*Projectile Length:* 80.2 mm

*Projectile Length With Fuze:*

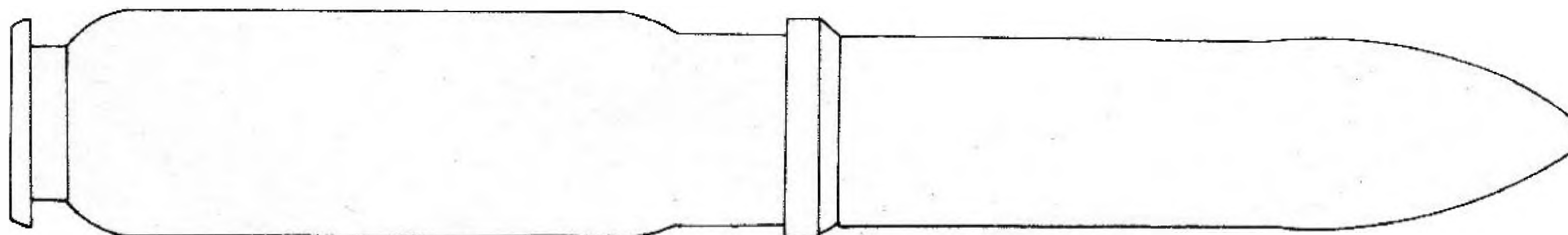
*Projectile Weight:* 131 gm

*Weight and Type of Filling:* Detonite - 4 gm

*Fuzing:* None

*Guns Used In:* Type 99 Mk. 1 Automatic Cannon  
Type 99 Mk. 2 Automatic Cannon

*Remarks:*



*Diameter:* 20 mm

*Designation:* Type 2 HE-T Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 90.0 gm

*Weight and Type of Filling:*

SHOUYAKU - 2.5 gm

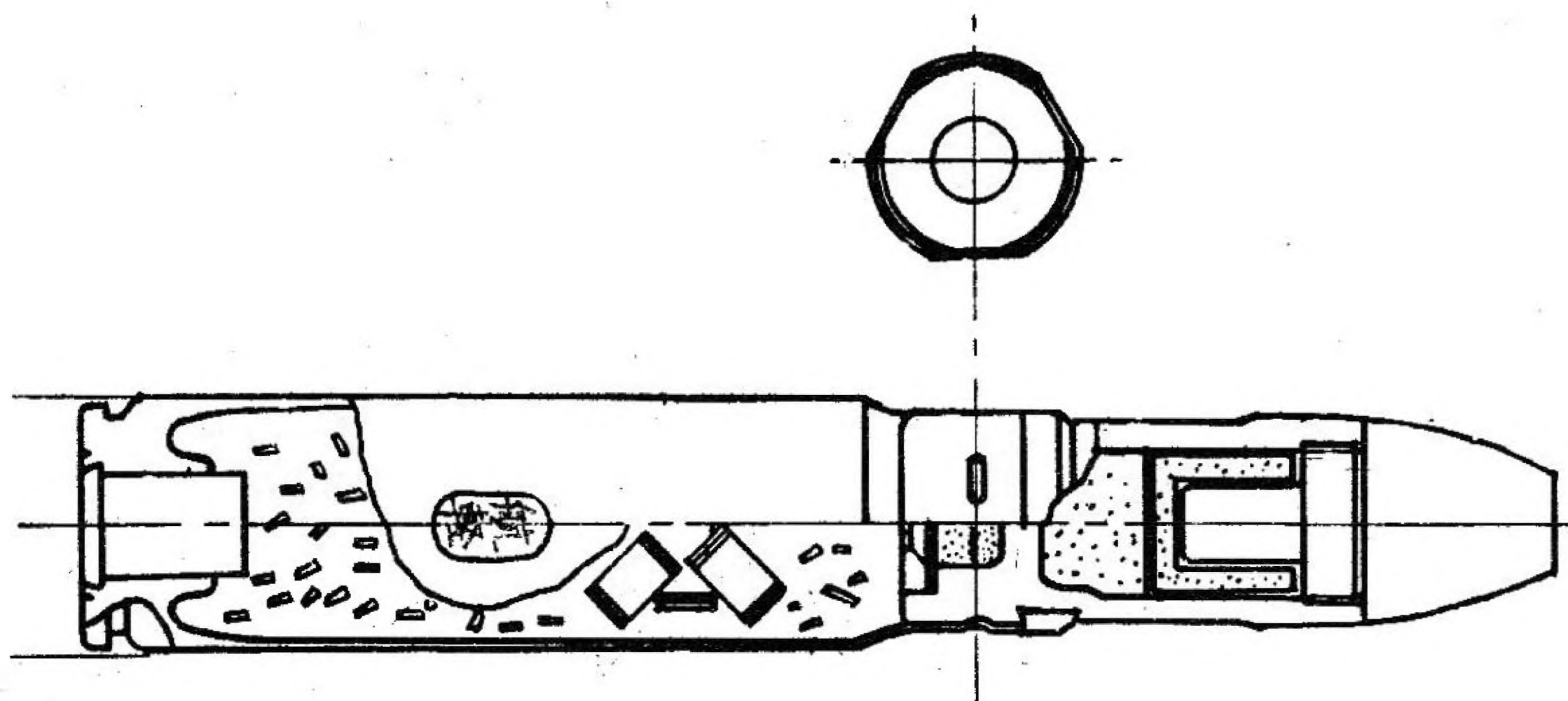
Tracer compound - 1.2 gm

Incendiary compound - 2.5 gm Igniting compound - 1.0 gm

*Fuzing:* Type 2 Small Instantaneous

*Guns Used In:* HO-5 Automatic Cannon

*Remarks:* Red is the normal tracer color, but yellow,  
green or pink may be substituted.  
Equipment Class - 1



*Diameter:* 20 mm

*Designation:* Type 94 HE-T Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

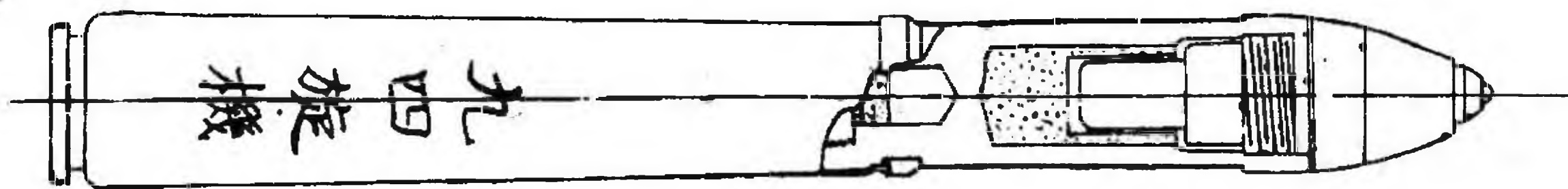
*Projectile Weight:* 138.2 gm

*Weight and Type of Filling:* MEIYAKU - 3.1 gm  
Tracer compound - 1.6 gm

*Fuzing:* Type 93 Small Instantaneous

*Guns Used In:* Type 94 Flexible Automatic Cannon

*Remarks:* Equipment Class - 1



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 20 mm

*Designation:* Type 97 HE-T Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 136 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 97 Automatic Gun

*Remarks:*

JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 20 mm

*Designation:* Type 99 HE-T Projectile, Modif. 2

*Color and Markings:* Red with two white stripes

*Projectile Length:* 82.0 mm

*Projectile Length With Fuze:*

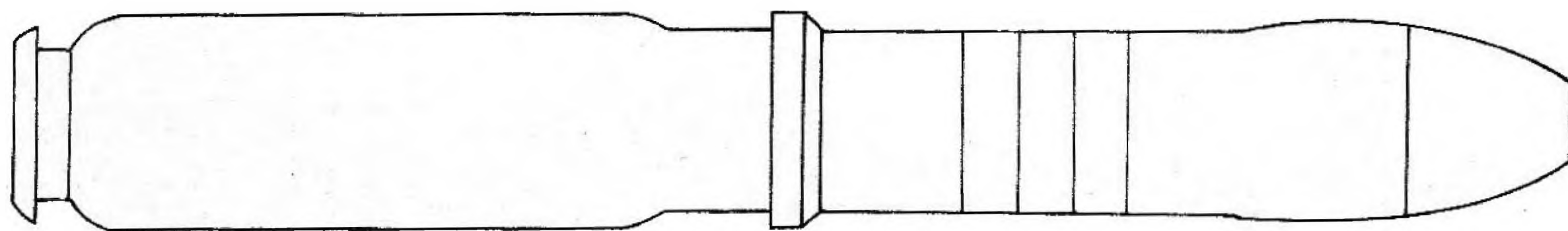
*Projectile Weight:* 128 gm

*Weight and Type of Filling:* Pentolite - 5.1 gm  
Tracer compound - 4.4 gm  
Igniting compound - 1.0 gm

*Fuzing:* Model 1

*Guns Used In:* Type 99 Mk. 1 Automatic Cannon  
Type 99 Mk. 2 Automatic Cannon

*Remarks:* Tracer burnout time - 2.9 seconds



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 20 mm

*Designation:* Type 99 HE-T Projectile, Modif. 3

*Color and Markings:* Red with three white stripes

*Projectile Length:* 83.0 mm

*Projectile Length With Fuze:*

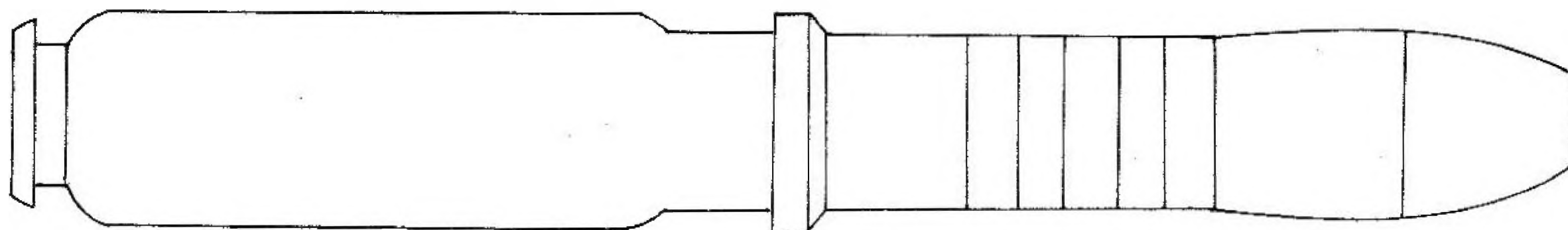
*Projectile Weight:* 128 gm

*Weight and Type of Filling:* Trotyl - 5.1 gm  
Detonite - 1 gm  
W. P. - 2.6 gm

*Fuzing:* Model 2 (rotor)

*Guns Used In:* Type 99 Mk. 1 Automatic Cannon  
Type 99 Mk. 2 Automatic Cannon

*Remarks:* The filler is also given as:  
Tracer compound - 4.4 gm  
Pentolite - 5.1 gm





Diameter: 20 mm

Designation: Type 100 HE Projectile w/Self-destroying  
Tracer

Color and Markings:

Projectile Length:

Projectile Length With Fuze:

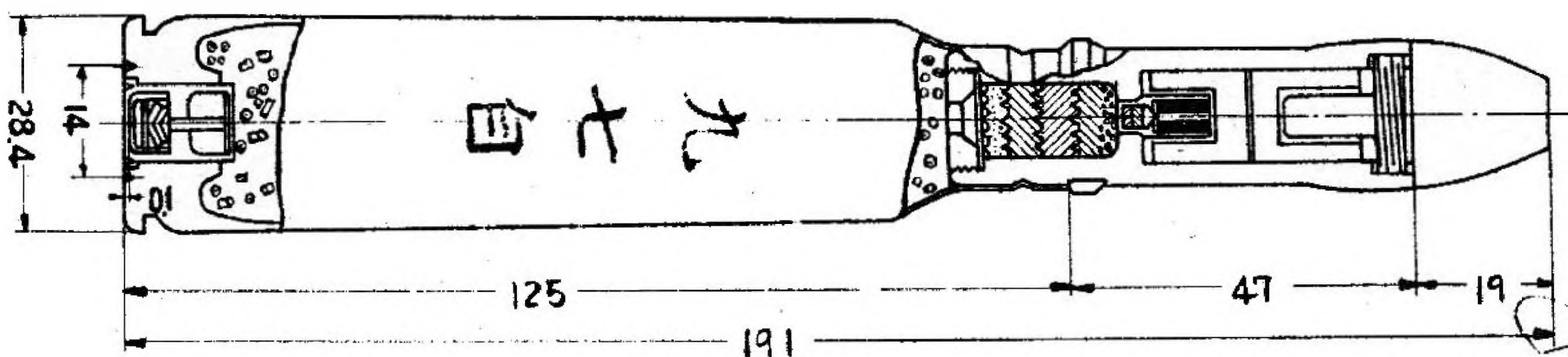
Projectile Weight: 132 gm

Weight and Type of Filling: SHOUYAKU - 4.6 gm  
Tracer compound - 3.0 gm

Fuzing: Type 100 Small Instantaneous

Guns Used In: Type 97 Automatic Gun  
Type 98 AA/AT Automatic Cannon

Remarks: Tracer burnout time - 12 seconds  
A modified version of this projectile is  
referred to with fine grain powder as  
a bursting charge  
Equipment Class - 1



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 20 mm

*Designation:* Type 99 HE-I Projectile, Modif. 2

*Color and Markings:* Yellow with two white stripes

*Projectile Length:* 82.0 mm

*Projectile Length With Fuze:*

*Projectile Weight:* 128 gm

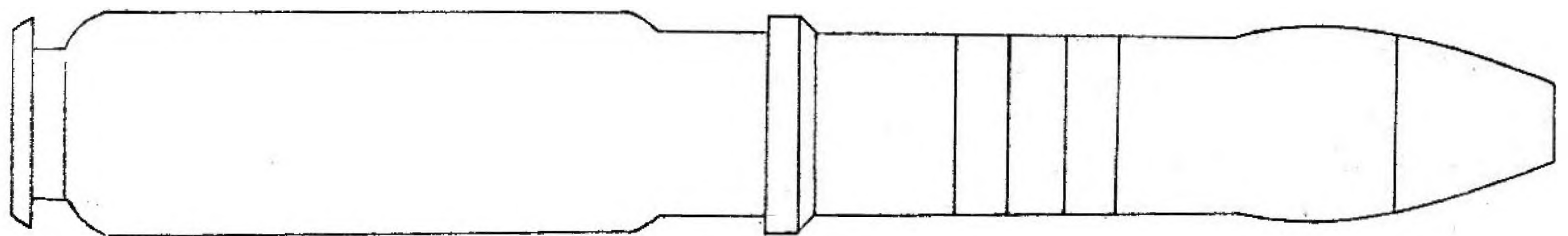
*Weight and Type of Filling:*

Detonite	-	1.0 gm
TNT	-	3.6 gm
W. P.	-	2.6 gm

*Fuzing:* Rotor type (without striker) (TN: Probably Model 2)

*Guns Used In:* Type 99 Mk. 1 Automatic Cannon  
Type 99 Mk. 2 Automatic Cannon

*Remarks:*



*Diameter:* 20 mm

*Designation:* Type 99 HE-I Projectile, Modif. 3

*Color and Markings:* Yellow with three white stripes

*Projectile Length:* 82.0 mm

*Projectile Length With Fuze:*

*Projectile Weight:* 127 gm

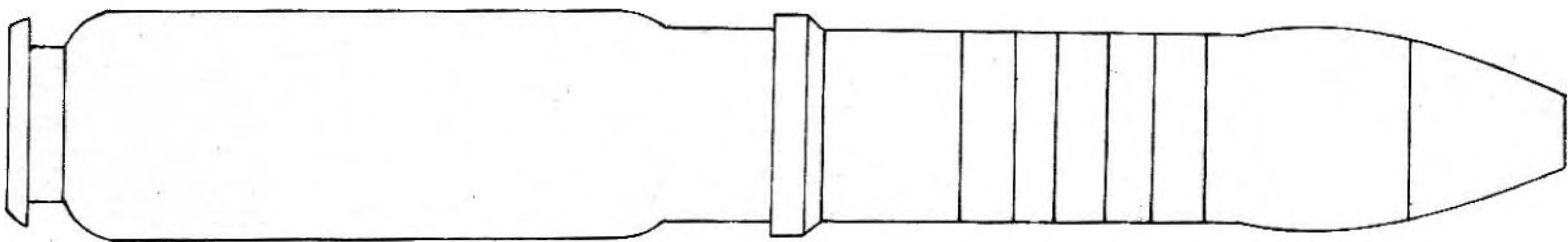
*Weight and Type of Filling:*

Detonite	-	1 gm
TNT	-	3.6 gm
W. P.	-	2.5 gm

*Fuzing:* Model 2 (rotor)

*Guns Used In:* Type 99 Mk. 1 Automatic Cannon  
Type 99 Mk. 2 Automatic Cannon

*Remarks:*



*Diameter:* 20 mm

*Designation:* Type 99 HE-I Projectile, Modif. 4

*Color and Markings:* Yellow with one broad white band

*Projectile Length:* 82.0 mm

*Projectile Length With Fuze:*

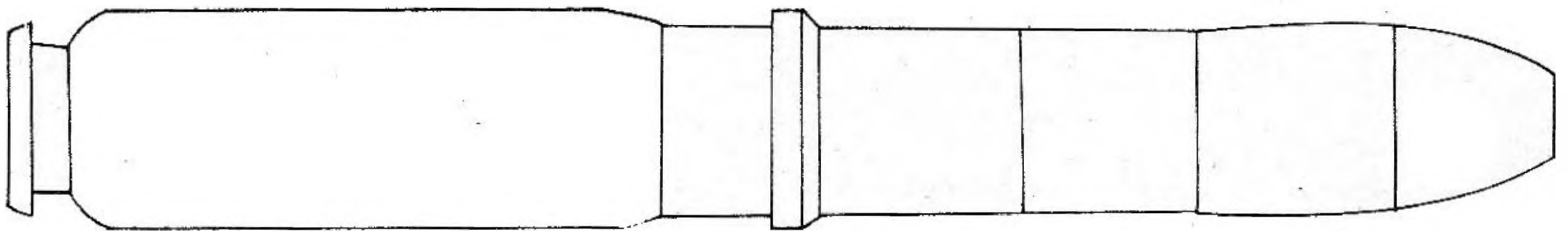
*Projectile Weight:* 130 gm

*Weight and Type of Filling:* TNT - .4 gm  
Aluminum - .2 gm  
W. P. - 5.7 gm

*Fuzing:* Model 2 (rotor)

*Guns Used In:* Type 99 Mk. 1 Automatic Cannon  
Type 99 Mk. 2 Automatic Cannon

*Remarks:*



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 20 mm

*Designation:* Type 99 HE-I Projectile, Modif. 4 Special

*Color and Markings:* Yellow with ( 卜 ) in white

*Projectile Length:* 82.0 mm

*Projectile Length With Fuze:*

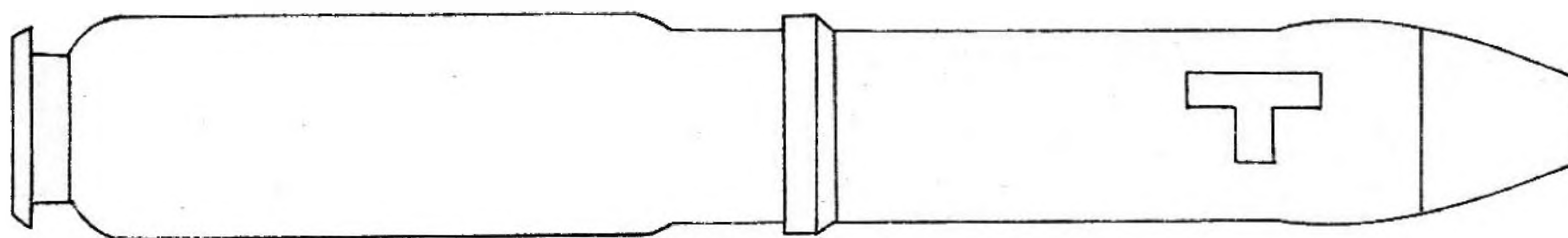
*Projectile Weight:* 130 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 99 Mk. 1 Automatic Cannon

*Remarks:*



*Diameter:* 25 mm

*Designation:* Practice Projectile

*Color and Markings:* Black

*Projectile Length:*

*Projectile Length With Fuze:* 114.15 mm

*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:* 25 mm Automatic Cannon Percussion

*Guns Used In:* Type 96 Automatic Cannon

*Remarks:* Used for AA or level firing

*Diameter:* 25 mm

*Designation:* AP Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:* 99.80 mm

*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:* 25 mm Automatic Cannon Percussion

*Guns Used In:* Type 96 Automatic Cannon

*Remarks:*

JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 25 mm

*Designation:* Tracer Projectile

*Color and Markings:* Red

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:* 25 mm Automatic Cannon Percussion

*Guns Used In:* Type 96 Automatic Cannon

*Remarks:* Red tracer

*Diameter:* 25 mm

*Designation:* Tracer Projectile, Modif. 1

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:* 110.15 mm

*Projectile Weight:*

*Weight and Type of Filling:* Red tracer compound - 4.2 gm  
Blue tracer compound - 2.8 gm

*Fuzing:*

*Guns Used In:* Type 96 Automatic Cannon

*Remarks:* Blue and red alternating color tracer  
Blue color lasts approximately 2.9 seconds  
Red color lasts approximately 5.9 seconds



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 25 mm

*Designation:* Tracer Projectile, Modif. 2

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:* 110.15 mm

*Projectile Weight:*

*Weight and Type of Filling:* Tracer compound - 8.6 gm

*Fuzing:*

*Guns Used In:* Type 96 Automatic Cannon

*Remarks:* Yellow tracer color  
Burnout time - 4.5 seconds

*Diameter:* 25 mm

*Designation:* HE Projectile

*Color and Markings:* Rust color

*Projectile Length:*

*Projectile Length With Fuze:* 114.15 mm

*Projectile Weight:* See remarks

*Weight and Type of Filling:* Type 92 Explosive 60%  
Aluminum powder 40%

*Fuzing:*

- 25 mm Automatic Cannon Percussion, Model 1
- 25 mm Automatic Cannon Percussion, Model 1, Modif 1
- 25 mm Automatic Cannon Percussion, Model 1, Modif 2
- 25 mm Automatic Cannon Percussion, Model 4

*Guns Used In:* Type 96 Automatic Cannon

*Remarks:* Two different shells listed: Model 1 Fuze used in shell weighing 252 gm, and a filler weight of 17.1 gm; Model 4 Fuze in shell weighing 249.5 gm and a filler weight of 19.1 gm

*Diameter:* 25 mm

*Designation:* HE-T Projectile

*Color and Markings:* Red

*Projectile Length:*

*Projectile Length With Fuze:*

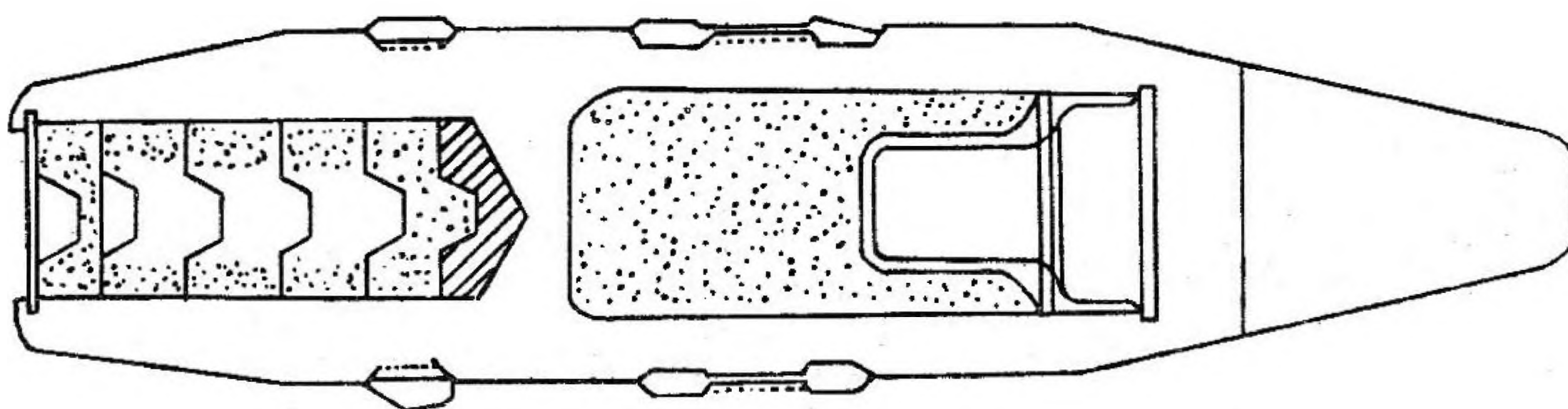
*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 96 Automatic Cannon

*Remarks:* Red tracer  
Burnout time - approx. 6 seconds



*Diameter:* 25 mm

*Designation:* HE-T Projectile, Modif 1 & 2

*Color and Markings:* Red

*Projectile Length:*

*Projectile Length With Fuze:* 110.15 mm

*Projectile Weight:*

*Weight and Type of Filling:*

Modif 1: 8 gm	} Type 92 Explosive 60%
Modif 2: 11 gm	

*Fuzing:* For Modif 1 - Percussion, Model 1  
For Modif 2 - Percussion, Model 4

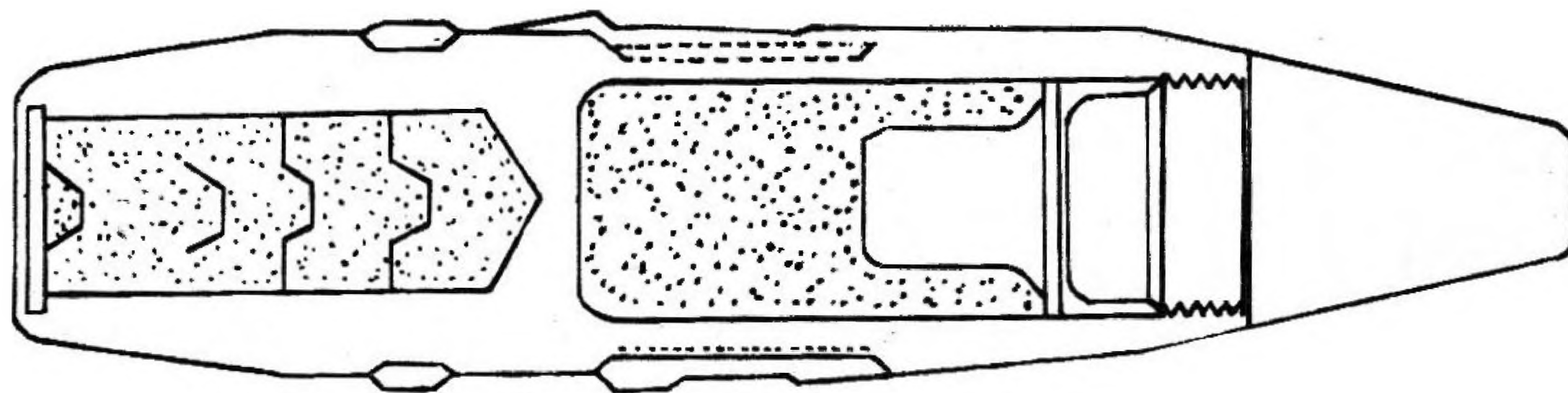
*Guns Used In:* Type 96 Automatic Cannon

*Remarks:* Modif 1 Tracer - Blue & red alternating tracer color

Modif 1: Red color lasts 2.9 seconds; burnout time 5.9 seconds

Modif 2 Tracer - Yellow tracer color

Modif 2: Burnout time - 4.5 seconds



*Diameter:* 25 mm

*Designation:* HE-T Projectile, Model 2

*Color and Markings:* Red body. Possibly green band around nose.

*Projectile Length:*

*Projectile Length With Fuze:* 110.15 mm

*Projectile Weight:*

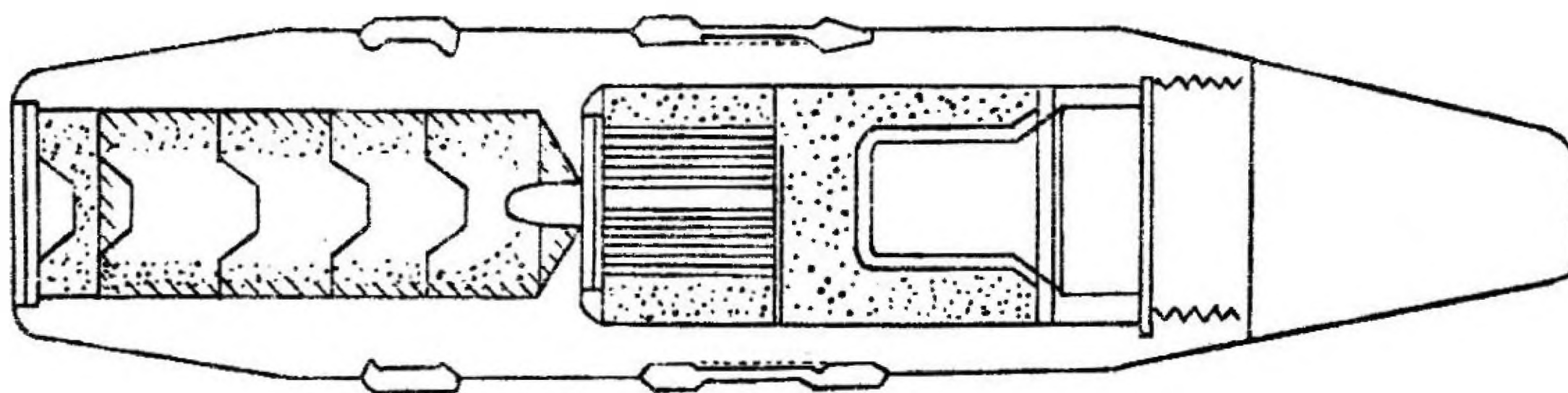
*Weight and Type of Filling:* Type 92 Explosive 60%  
Aluminum powder 40%  
(see remarks)

*Fuzing:*

25 mm Automatic Cannon Percussion, Model 1  
25 mm Automatic Cannon Percussion, Model 1, Modif 1  
25 mm Automatic Cannon Percussion, Model 1, Modif 2  
25 mm Automatic Cannon Percussion, Model 4  
(see remarks)

*Guns Used In:* Type 96 Automatic Cannon

*Remarks:* Two different shells listed: Model 1 Fuze used in shell weighing 243.0 gm and a filler weight of 8.5 gm; Model 4 Fuze used in shell weighing 240.6 gm and a filler weight of 10.6 gm  
Yellow tracer color  
Burnout time - approx. 6 seconds



*Diameter:* 25 mm

*Designation:* HE-T Projectile, Model 2, Modif 1

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:*

- 25 mm Automatic Cannon Percussion, Model 1
- 25 mm Automatic Cannon Percussion, Model 1, Modif 1
- 25 mm Automatic Cannon Percussion, Model 1, Modif 2
- 25 mm Automatic Cannon Percussion, Model 4

*Guns Used In:* Type 96 Automatic Cannon

*Remarks:*

*Diameter:* 25 mm

*Designation:* HE-I Projectile

*Color and Markings:* Green

*Projectile Length:*

*Projectile Length With Fuze:* 114.25 mm

*Projectile Weight:*

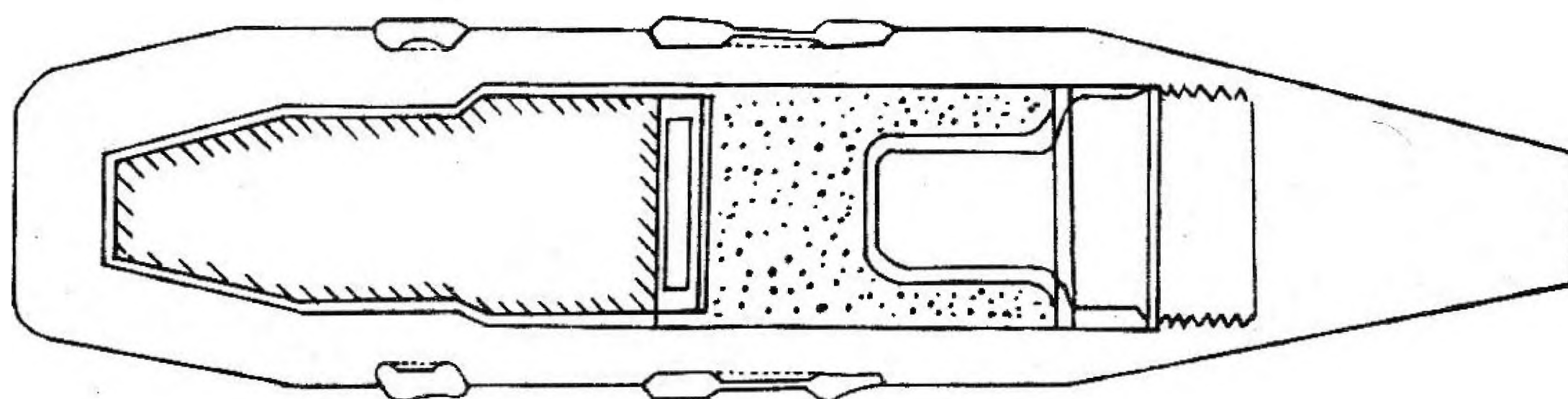
*Weight and Type of Filling:* Type 92 Explosive 60%  
Aluminum powder 40%  
(see remarks)

*Fuzing:*

25 mm Automatic Cannon Percussion, Model 1  
25 mm Automatic Cannon Percussion, Model 1, Modif 1  
25 mm Automatic Cannon Percussion, Model 1, Modif 2  
25 mm Automatic Cannon Percussion, Model 4  
(see remarks)

*Guns Used In:* Type 96 Automatic Cannon

*Remarks:* Two different shells listed: Model 1 Fuze used in shell weighing 254.5 gm and a filler weight of 5.6 gm; Model 4 Fuze used in shell weighing 252.0 gm and a filler weight of 7.6 gm





JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 30 mm

*Designation:* Type 2 30 mm Hollow Charge Grenade

*Color and Markings:* ( *A* ) in white on black body, yellow band around nose

*Projectile Length:*

*Projectile Length With Fuze:* 162 mm

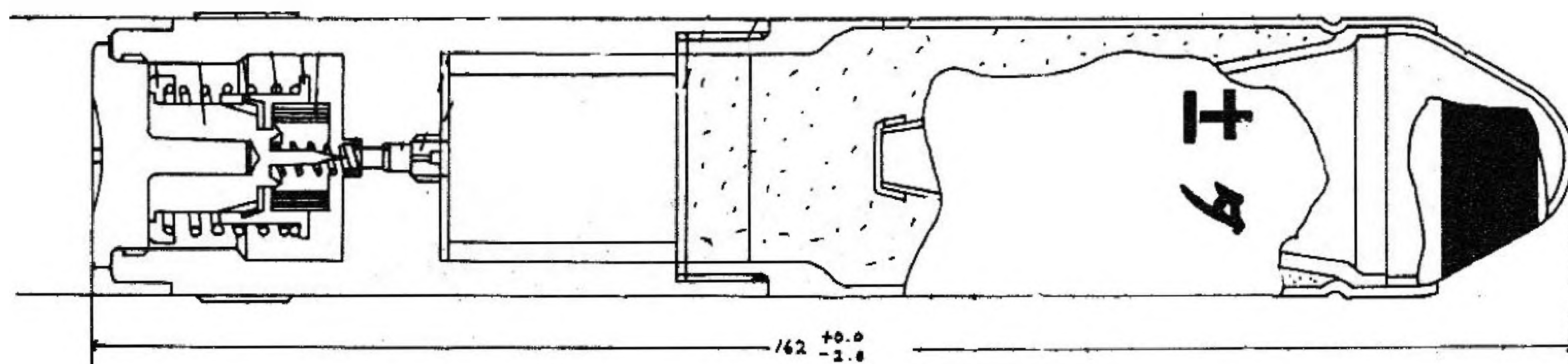
*Projectile Weight:* 330 gm

*Weight and Type of Filling:* TNT 50%  
Cyclonite 50% } 50 gm

*Fuzing:*

*Guns Used In:* Type 38 Rifle } with Type 2 Grenade Launcher  
Type 99 Rifle }

*Remarks:*





JAPANESE PROJECTILES.  
CINCPAC-CINCPHA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 30 mm

*Designation:* Practice Projectile

*Color and Markings:* Black

*Projectile Length:* 90 mm

*Projectile Length With Fuze:*

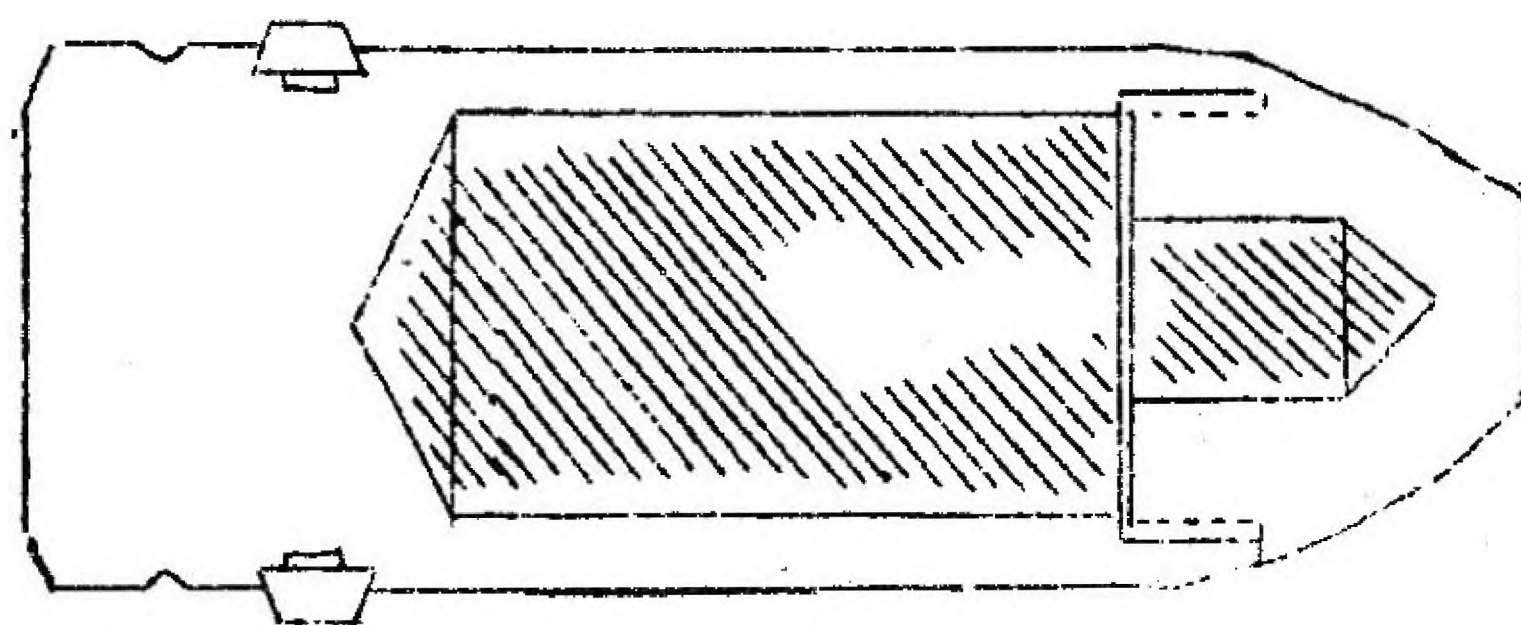
*Projectile Weight:* 266 gm

*Weight and Type of Filling:*

*Fuzing:* None

*Guns Used In:* Type 2 30 mm Automatic Cannon, Model 1

*Remarks:*



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 30 mm

*Designation:* Tracer Projectile

*Color and Markings:* Black with red nose

*Projectile Length:* 90 mm

*Projectile Length With Fuze:*

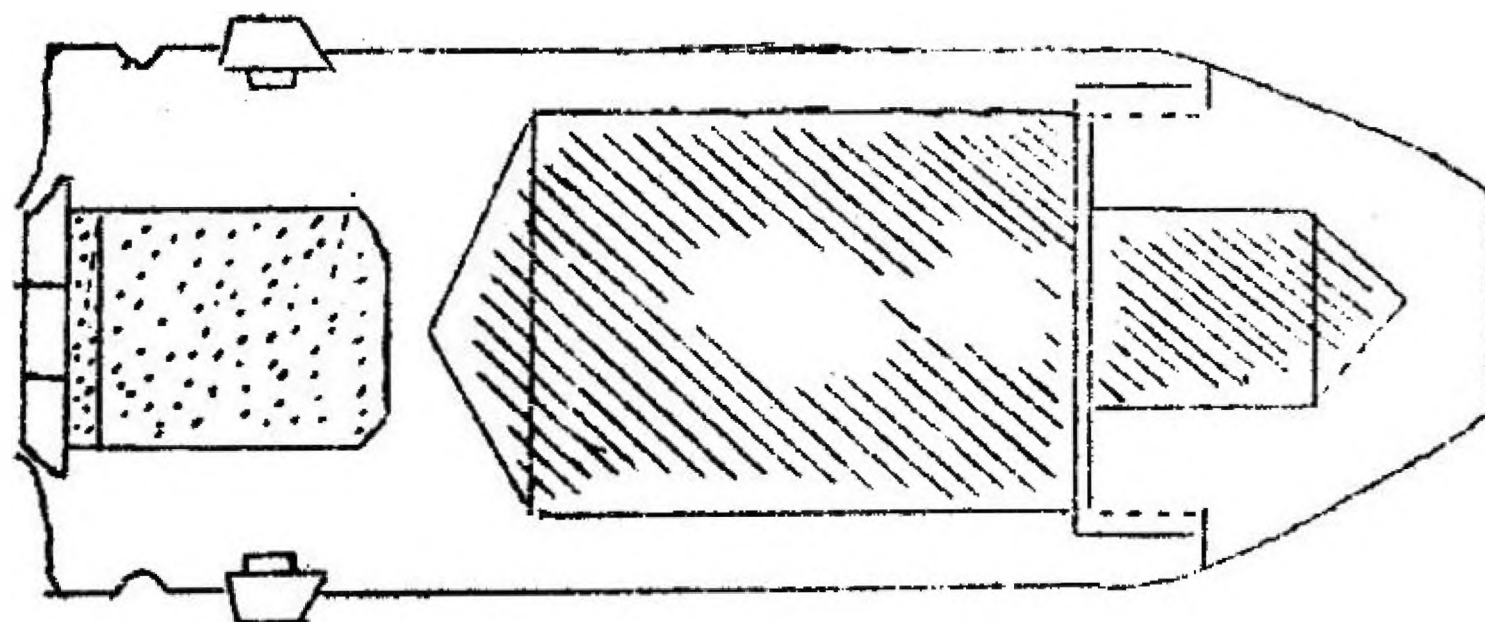
*Projectile Weight:* 273 gm

*Weight and Type of Filling:* Tracer compound - 5.2 gm

*Fuzing:* None

*Guns Used In:* Type 2 30 mm Automatic Cannon, model 1

*Remarks:* Tracer - yellow



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 30 mm

*Designation:* AP-HE Projectile

*Color and Markings:* White

*Projectile Length:* 80 mm

*Projectile Length With Fuze:*

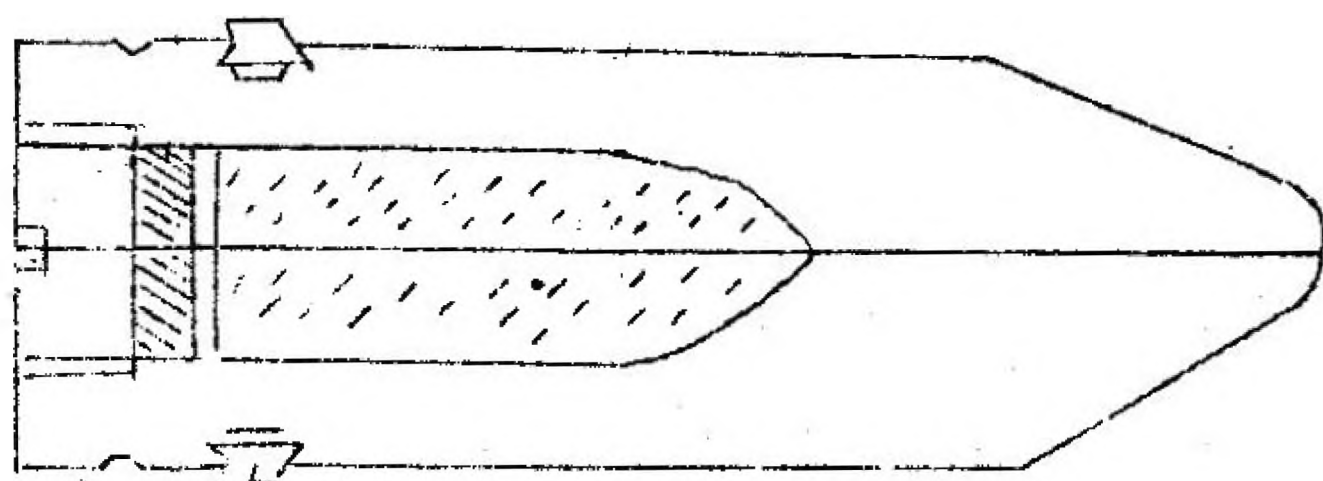
*Projectile Weight:* 295 gm

*Weight and Type of Filling:* Detonite - 11.6 gm

*Fuzing:* None

*Guns Used In:* Type 2 30 mm Automatic Cannon, Model 1

*Remarks:*



*Diameter:* 30 mm

*Designation:* HE Projectile

*Color and Markings:* Rust color

*Projectile Length:*

*Projectile Length With Fuze:* 90 mm

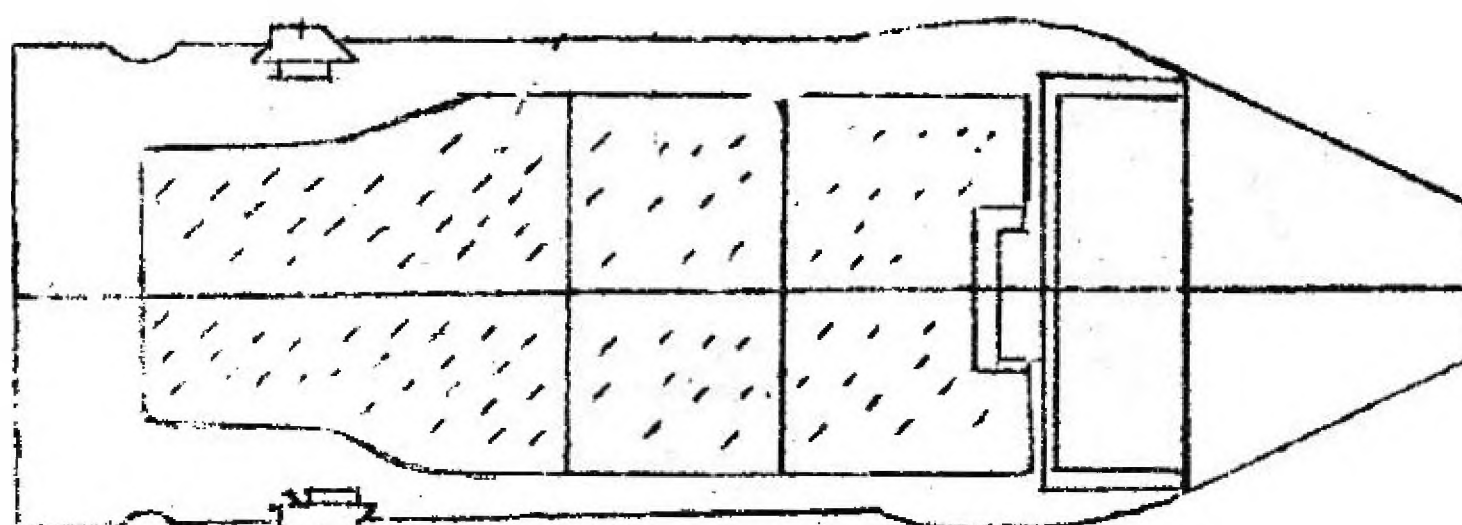
*Projectile Weight:* 263 gm

*Weight and Type of Filling:* Pentolite - 29.0 gm

*Fuzing:* Rotor Type

*Guns Used In:* Type 2 30 mm Automatic Cannon, Model 1

*Remarks:*



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 30 mm

*Designation:* HE-T Projectile

*Color and Markings:* Red with rust color stripe around  
rotating band

*Projectile Length:*

*Projectile Length With Fuze:* 90 mm

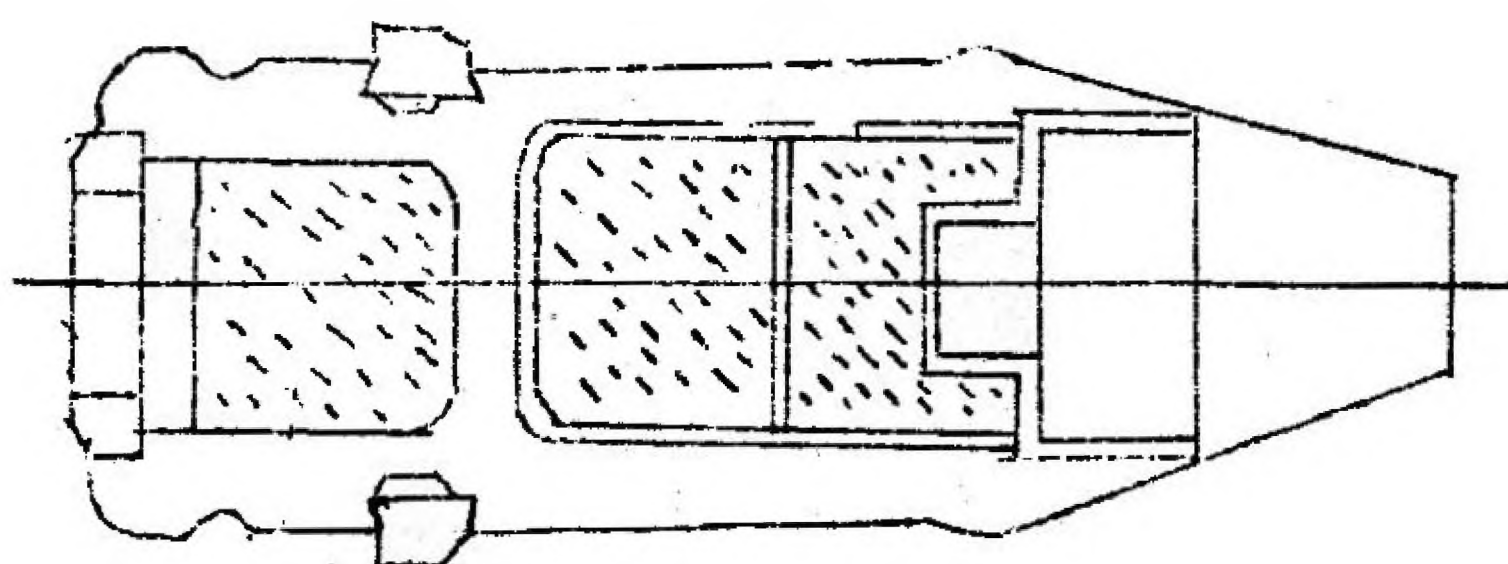
*Projectile Weight:* 274 gm

*Weight and Type of Filling:* Pentolite - 21.0 gm  
Tracer compound - 5.2 gm

*Fuzing:* Rotor Type

*Guns Used In:* Type 2 30 mm Automatic Cannon, Model 1

*Remarks:*



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 30 mm

*Designation:* HE-I Projectile

*Color and Markings:* Yellow

*Projectile Length:*

*Projectile Length With Fuze:* 90 mm

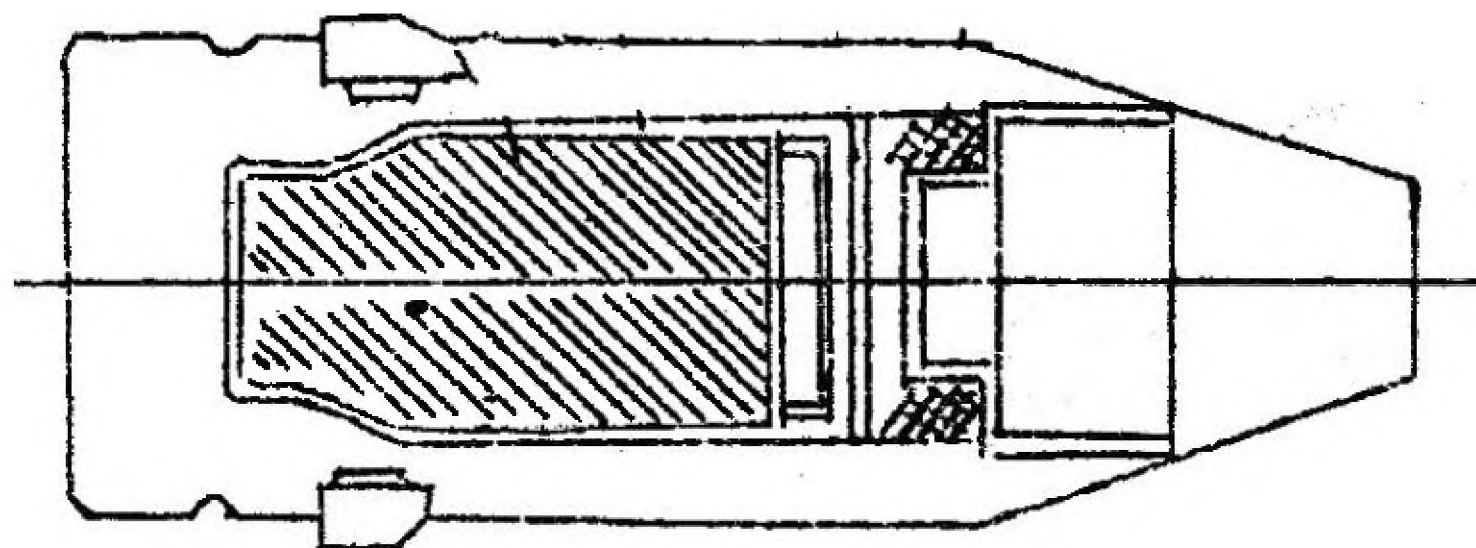
*Projectile Weight:* 263 gm

*Weight and Type of Filling:* Pentolite - 2.2 gm  
Incendiary compound - 20.0 gm

*Fuzing:* Rotor Type

*Guns Used In:* Type 2 30 mm Automatic Cannon, Model 1

*Remarks:*



Diameter: 37 mm

Designation: Type 94 Substitute HE Projectile

Color and Markings:

Projectile Length:

Projectile Length With Fuze:

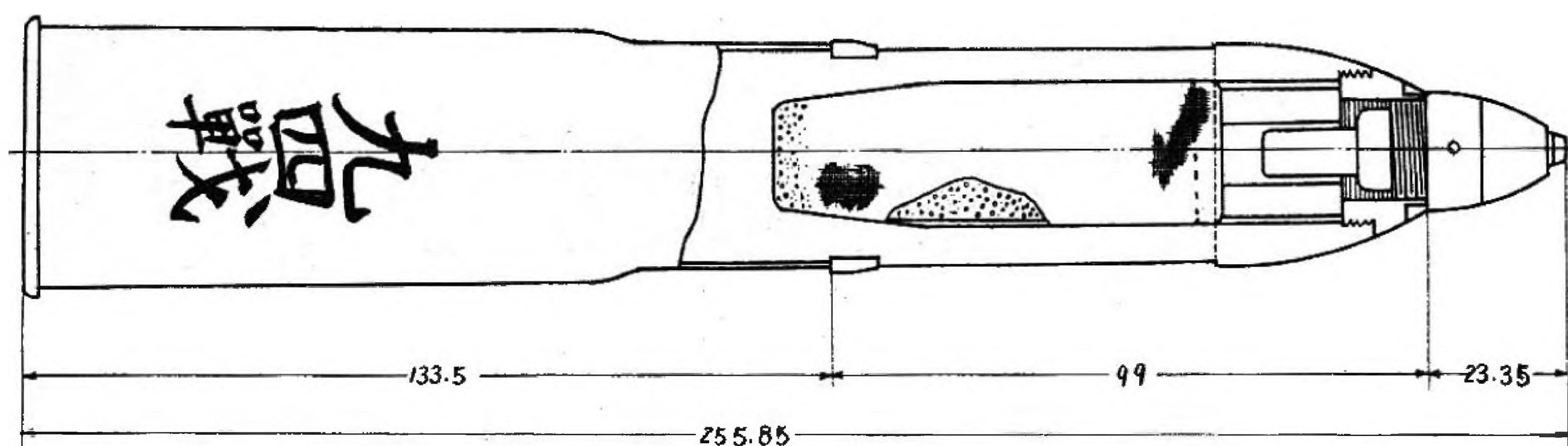
Projectile Weight: 645 gm

Weight and Type of Filling: Fine grain powder - 27 gm

Fuzing: Type 93 Small Instantaneous

Guns Used In: 11th Year Type 37 mm Gun  
Type 94 37 mm Gun  
Type 94 37 mm Tank Gun

Remarks: Weight also given as 450 gm  
Equipment Class - 4





*Diameter:* 37 mm

*Designation:* Type 94 Substitute AP Projectile

*Color and Markings:*

*Projectile Length:* 123.5 mm

*Projectile Length With Fuze:*

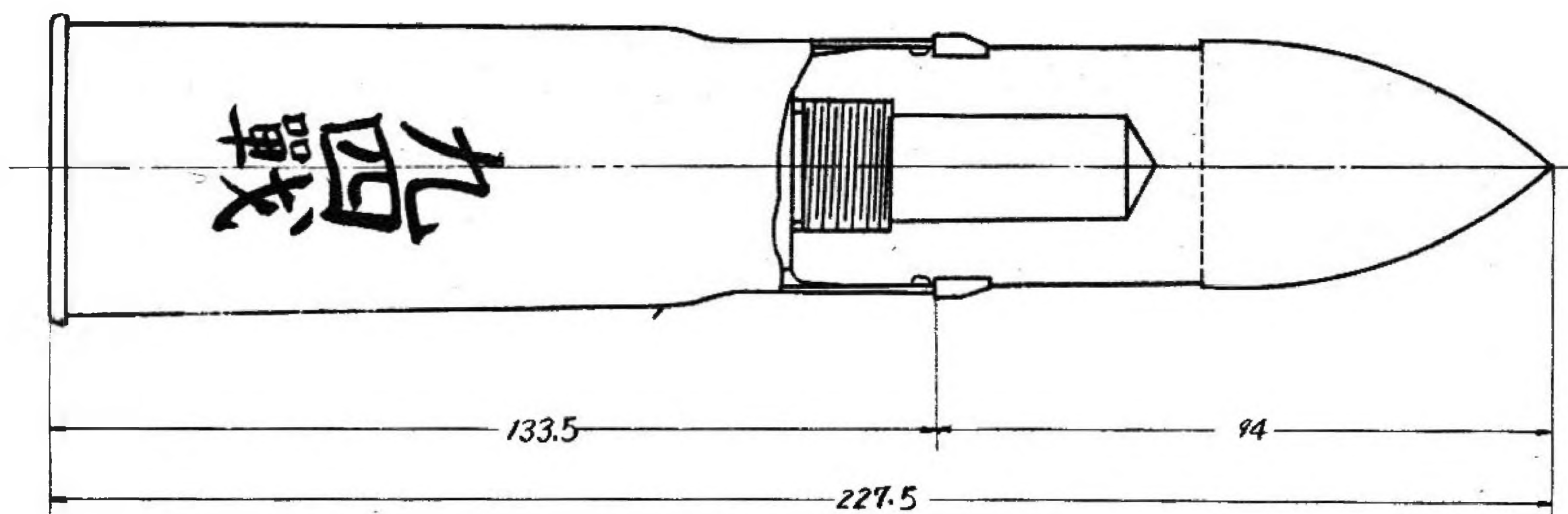
*Projectile Weight:* 700 gm

*Weight and Type of Filling:*

*Fuzing:* Type 94 Small Short Delay Base

*Guns Used In:* Type 98 37 mm Tank Gun  
11th Year Type 37 mm Gun  
Type 94 37 mm Gun  
Type 94 37 mm Tank Gun

*Remarks:* When used in Type 94 37 mm Gun and Tank Gun  
no fuze is used  
Equipment Class - 4



*Diameter:* 37 mm

*Designation:* Type 96 Improved Substitute Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

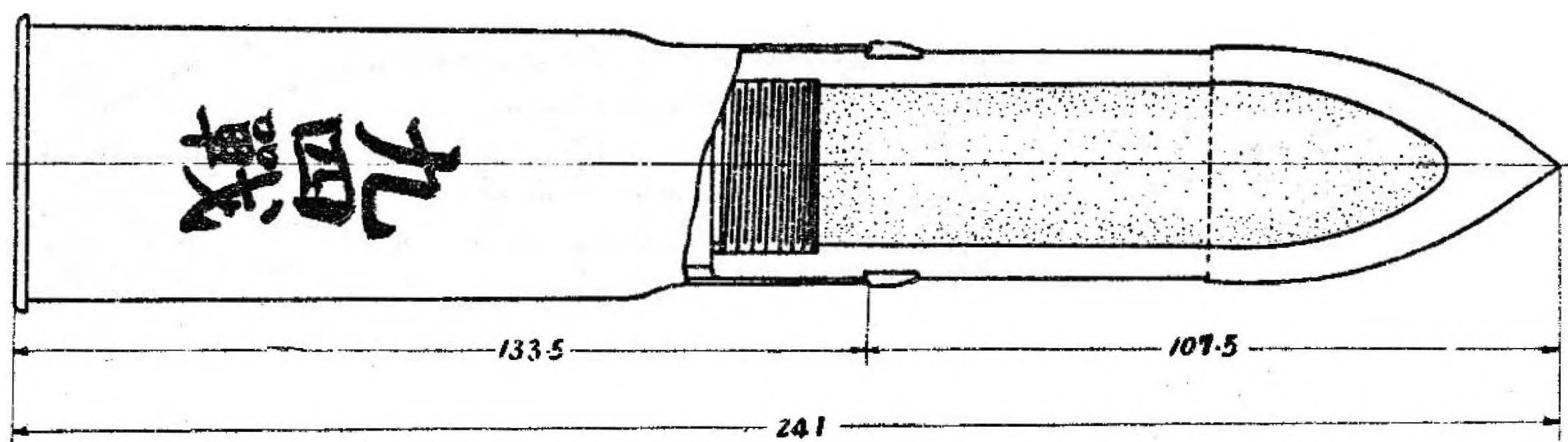
*Projectile Weight:* 715 gm

*Weight and Type of Filling:* Sand - 115 gm

*Fuzing:*

*Guns Used In:* Type 94 37 mm Tank Gun

*Remarks:* Equipment Class - 4



*Diameter:* 37 mm

*Designation:* 12th Year Type Substitute Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

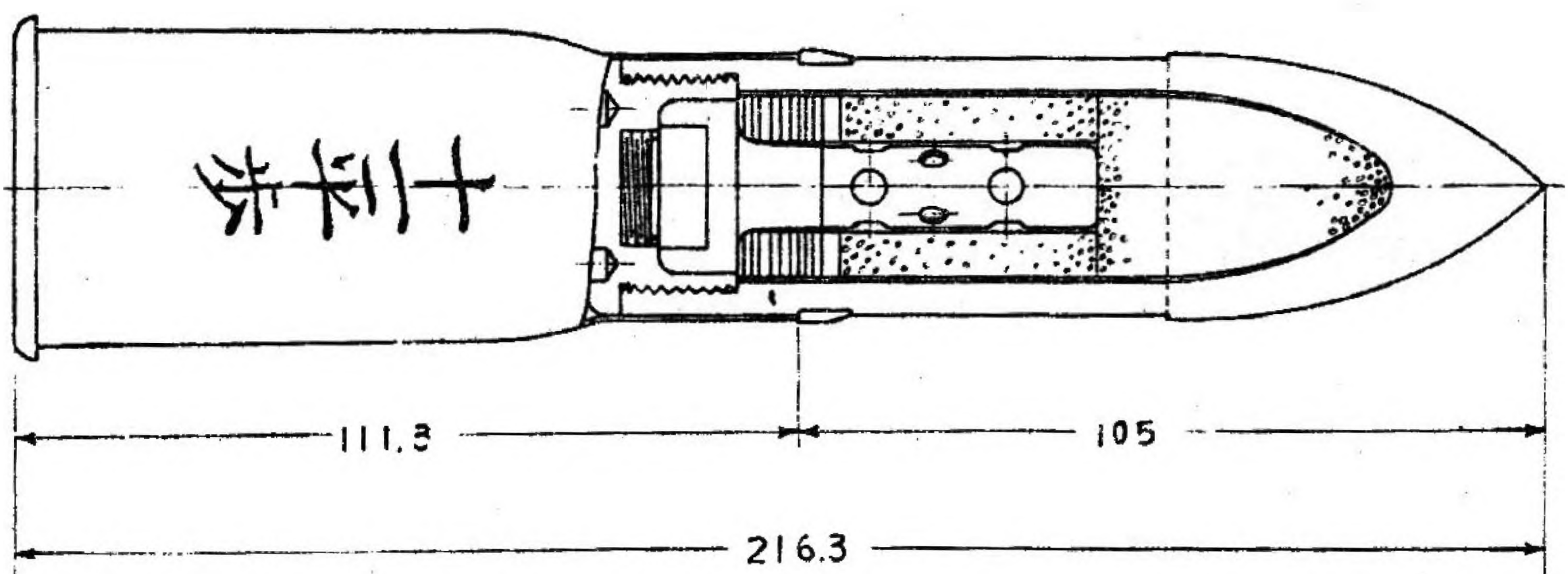
*Projectile Weight:* 650 gm

*Weight and Type of Filling:* Fine grain powder - 50 gm

*Fuzing:* 12th Year Type Fuze for 37 mm Inf Gun

*Guns Used In:* 11th Year Type 37 mm Gun

*Remarks:* Equipment Class - 4



*Diameter:* 37 mm

*Designation:* Type 94 AP Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

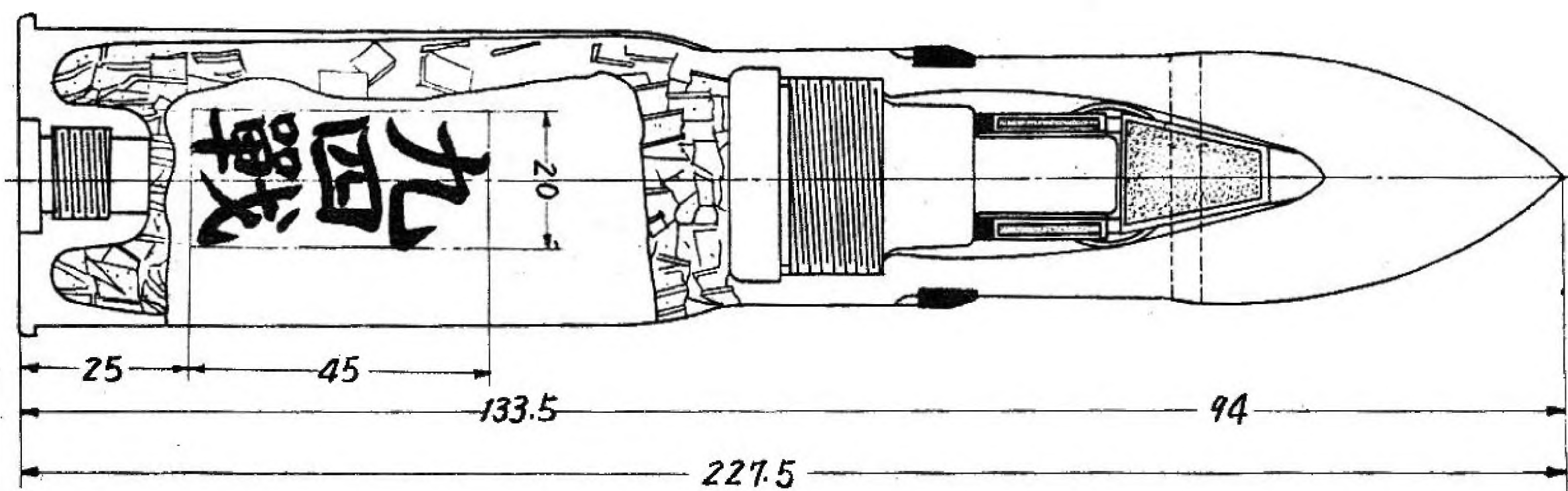
*Projectile Weight:* 700 gm

*Weight and Type of Filling:* Picric acid - 10 gm

*Fuzing:* Type 94 Small Short Delay Base

*Guns Used In:* 11th Year Type 37 mm Gun  
Type 94 37 mm Gun  
Type 94 37 mm Tank Gun

*Remarks:* Black varnish on threads of fuze  
Equipment Class - 1  
Will penetrate 20, 25 & 30 mm steel plate at  
1000, 800, and 300 meters, respectively



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 37 mm

*Designation:* Type 1 AP Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 726 gm

*Weight and Type of Filling:* SHŌUYAKU - 8 gm

*Fuzing:* Type 1 Mk. 1 AP Base

*Guns Used In:* Type 94 37 mm Gun  
Type 1 37 mm Gun

*Remarks:*

*Diameter:* 37 mm

*Designation:* Type 94 HE Projectile

*Color and Markings:*

*Projectile Length:* 124 mm

*Projectile Length With Fuze:* 147.35 mm

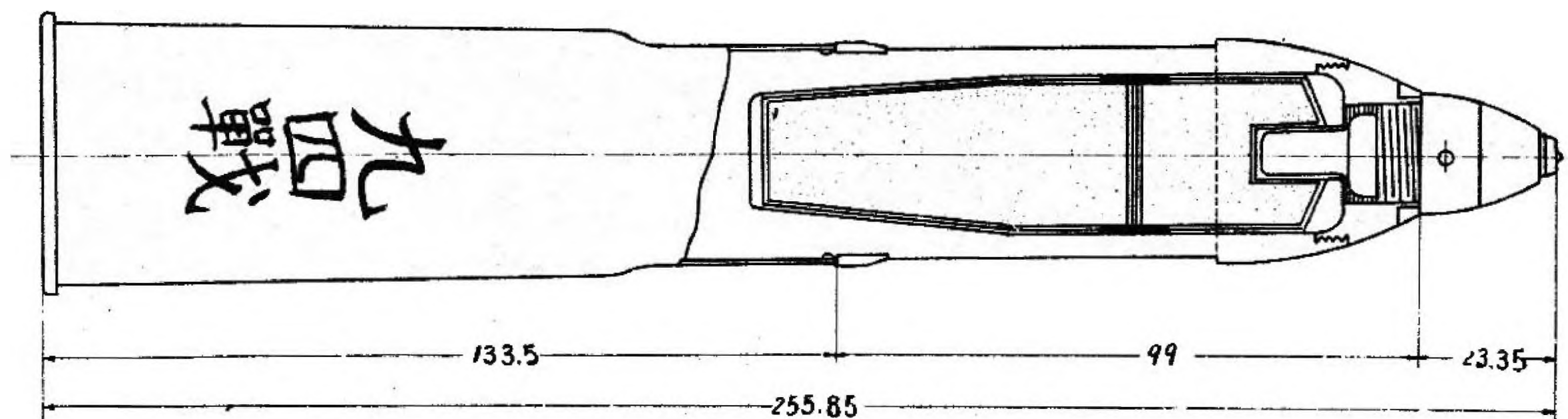
*Projectile Weight:* 645 gm

*Weight and Type of Filling:* Picric acid - 20 gm  
TNT - 38.3 gm

*Fuzing:* Type 93 Small Instantaneous

*Guns Used In:* 11th Year Type 37 mm Gun  
Type 94 37 mm Gun  
Type 94 37 mm Tank Gun

*Remarks:* Effective radius - approx. 8 meters  
Eq lpment Class - 1





*Diameter:* 37 mm

*Designation:* 12th Year Type HE Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

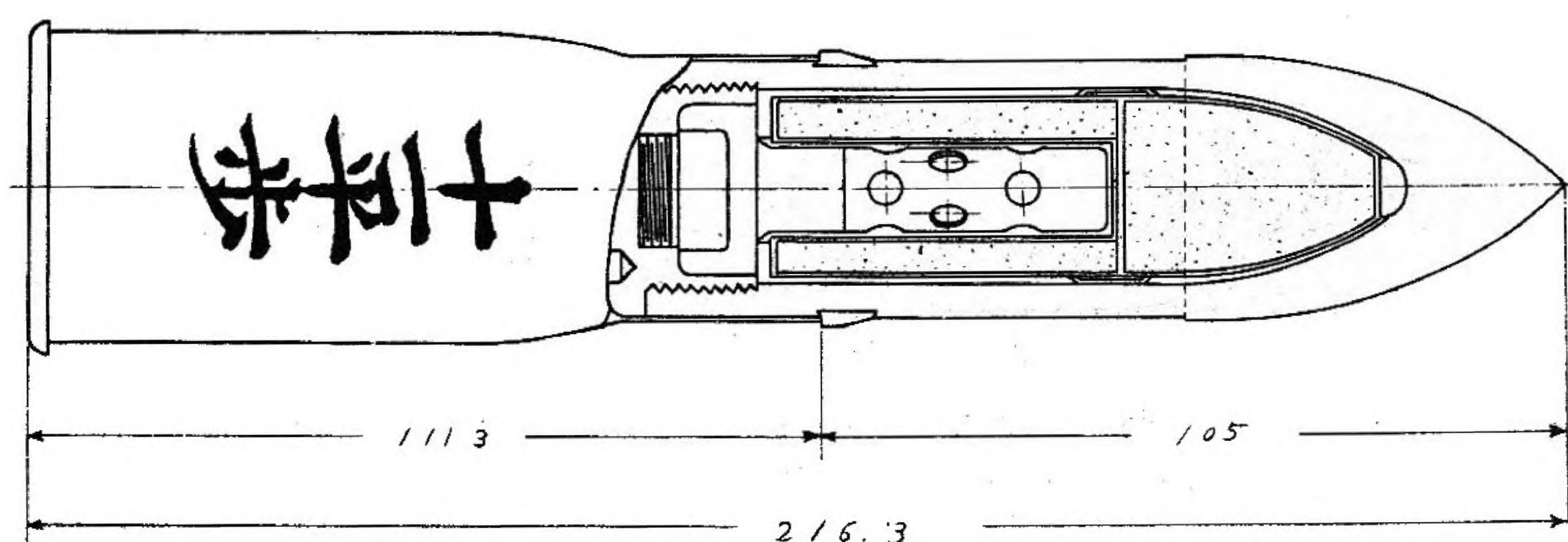
*Projectile Weight:* 650 gm

*Weight and Type of Filling:* TNT - 42 gm

*Fuzing:* 12th Year Type Fuze for 37 mm Inf Gun

*Guns Used In:* 11th Year Type 37 mm Gun

*Remarks:*





*Diameter:* 37 mm

*Designation:* 13th Year Type HE Projectile

*Color and Markings:* White band midway between bourrelet  
and rotating band

*Projectile Length:*

*Projectile Length With Fuze:*

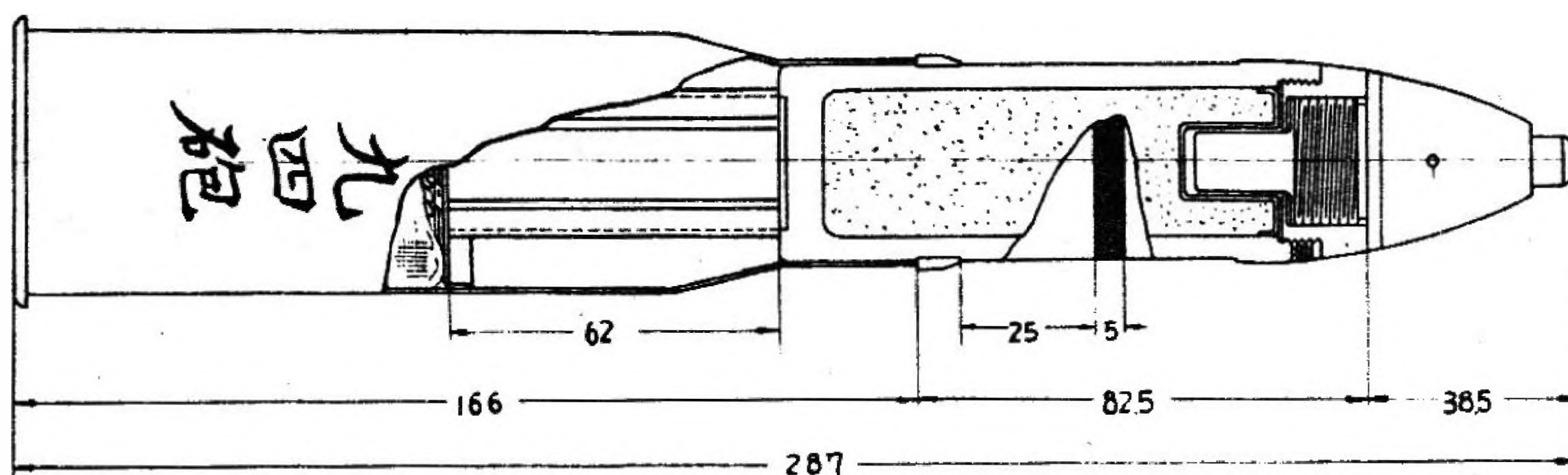
*Projectile Weight:* 664 gm

*Weight and Type of Filling:* TNT - 62 gm

*Fuzing:* 13th Year Type Small Instantaneous Nose B  
14th Year Type Small Instantaneous Nose A

*Guns Used In:* 11th Year Type 37 mm Gun  
Type 94 37 mm Gun  
Type 94 37 mm Tank Gun

*Remarks:* Fuze A for 11th Year Type Gun; Fuze B for  
Type 94 37 mm Gun  
Equipment Class - 2



Diameter: 40 mm

Designation: Type 2 40 mm Hollow Charge Grenade

Color and Markings: ( ㄨ ) in white on black body, yellow band around nose

Projectile Length:

Projectile Length With Fuze: 179 mm

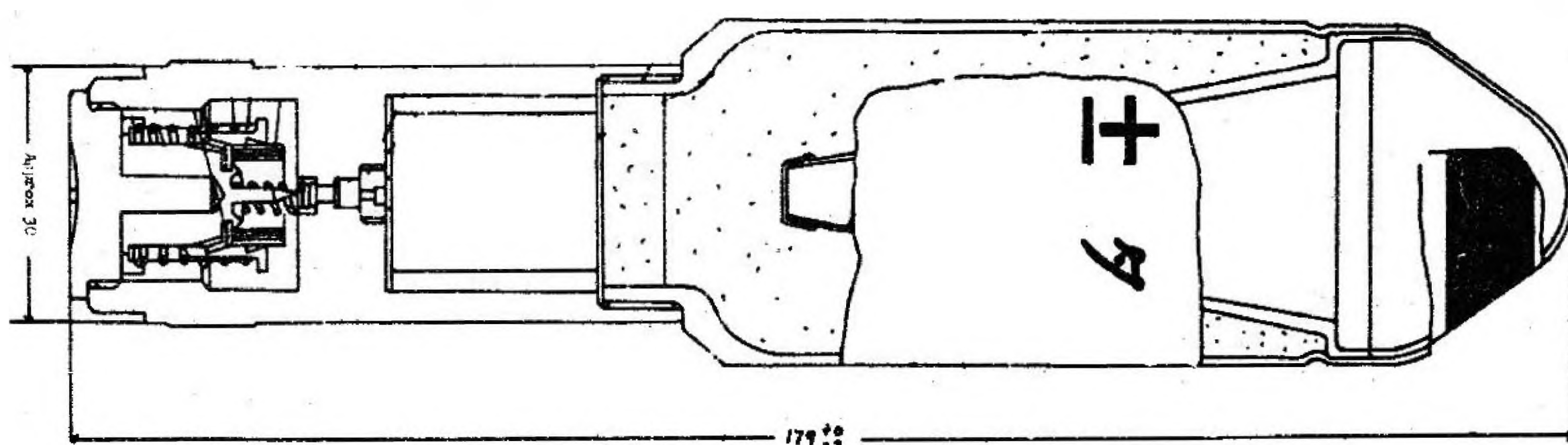
Projectile Weight: 370 gm

Weight and Type of Filling: TNT 50%  
Cyclonite 50% } 100 gm

Fuzing:

Guns Used In: Type 38 Rifle } with Type 2 Grenade Launcher  
Type 99 Rifle }

Remarks:



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 47 mm

*Designation:* Type 1 AP Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 1.47 kg

*Weight and Type of Filling:* SHŌUYAKU - 17 gm

*Fuzing:* Type 1 Mk. 2 Small AP Base

*Guns Used In:* Type 1 47 mm AT Gun

*Remarks:*

The following grenades may be fired either from a 50 mm grenade discharger or hand thrown; information on the following grenades will be found on the pages shown.

Type 91 Practice Hand Grenade w/Time Fuze . . .	page 25
Type 91 Hand Grenade w/Time Fuze . . . . .	page 26
10th Year Type Practice Hand Grenade w/Time Fuze (Firing Practice) . . . . .	page 33
10th Year Type Hand Grenade w/Time Fuze . . . .	page 35

*Diameter:* 50 mm

*Designation:* Type 94 Substitute Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 790 gm

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 89 Heavy Grenade Discharger

*Remarks:* Equipment Class - 4

*Diameter:* 50 mm

*Designation:* Type 94 Practice Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:* 141.5 mm

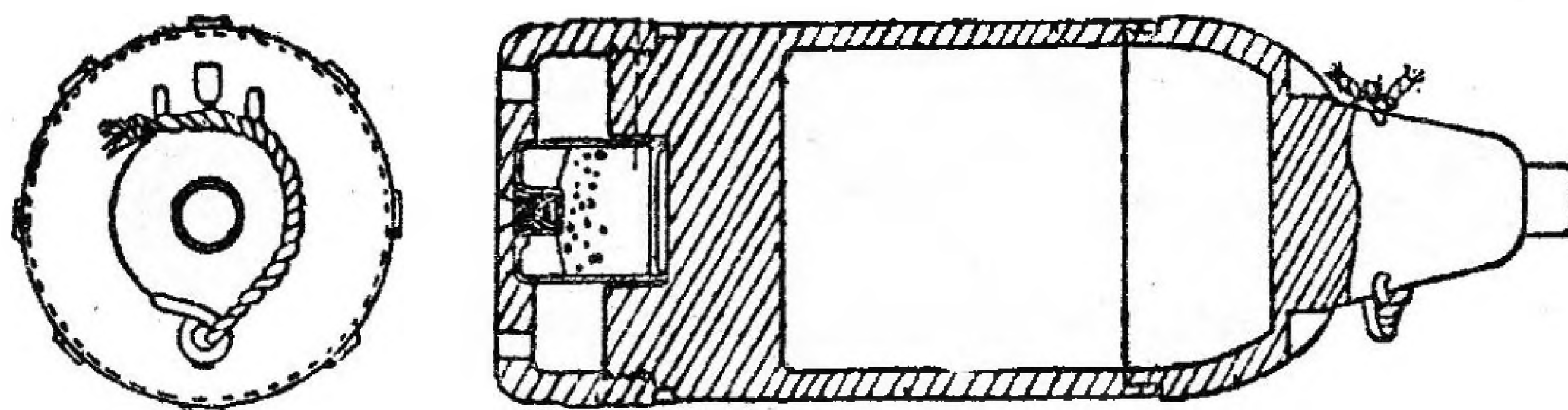
*Projectile Weight:* 800 gm

*Weight and Type of Filling:* Fine grain powder - 220 gm

*Fuzing:* Type 88 Small Instantaneous

*Guns Used In:* Type 89 Heavy Grenade Discharger

*Remarks:* Made of wrought iron  
Eight 4 mm gas ports on the base cover  
Equipment Class - 4



*Diameter:* 50 mm

*Designation:* 10th Year Type Illuminating Projectile A, B

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

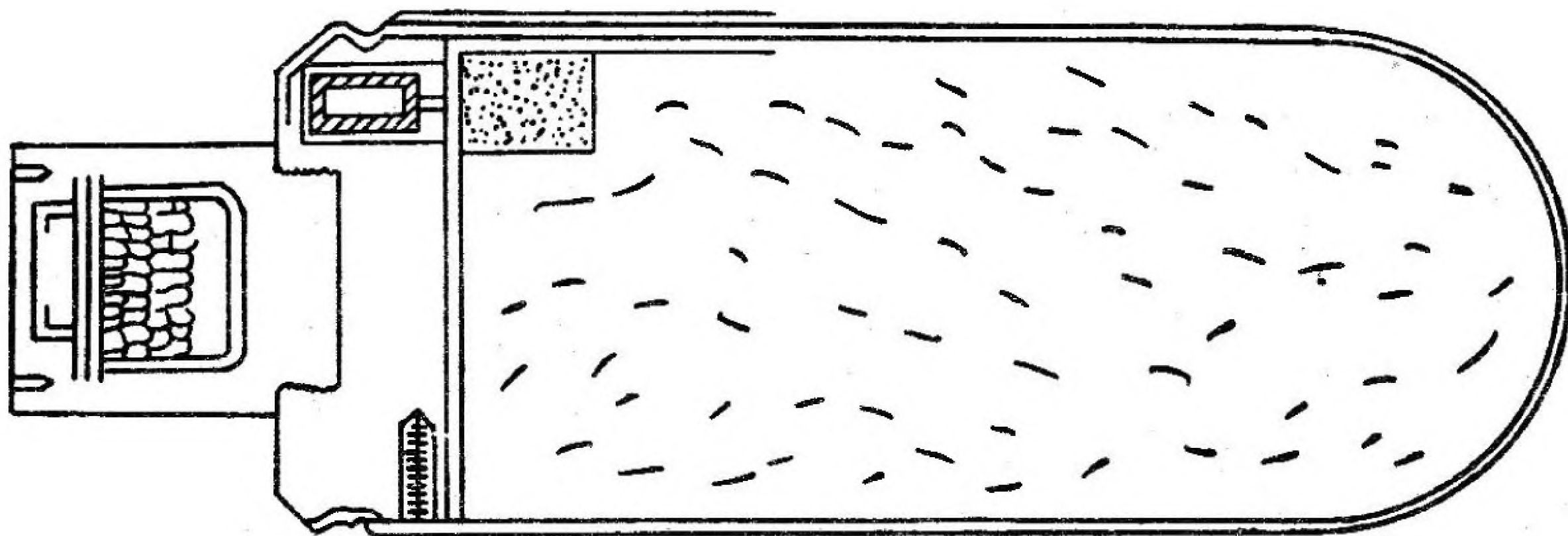
*Projectile Weight:* 550 gm

*Weight and Type of Filling:*

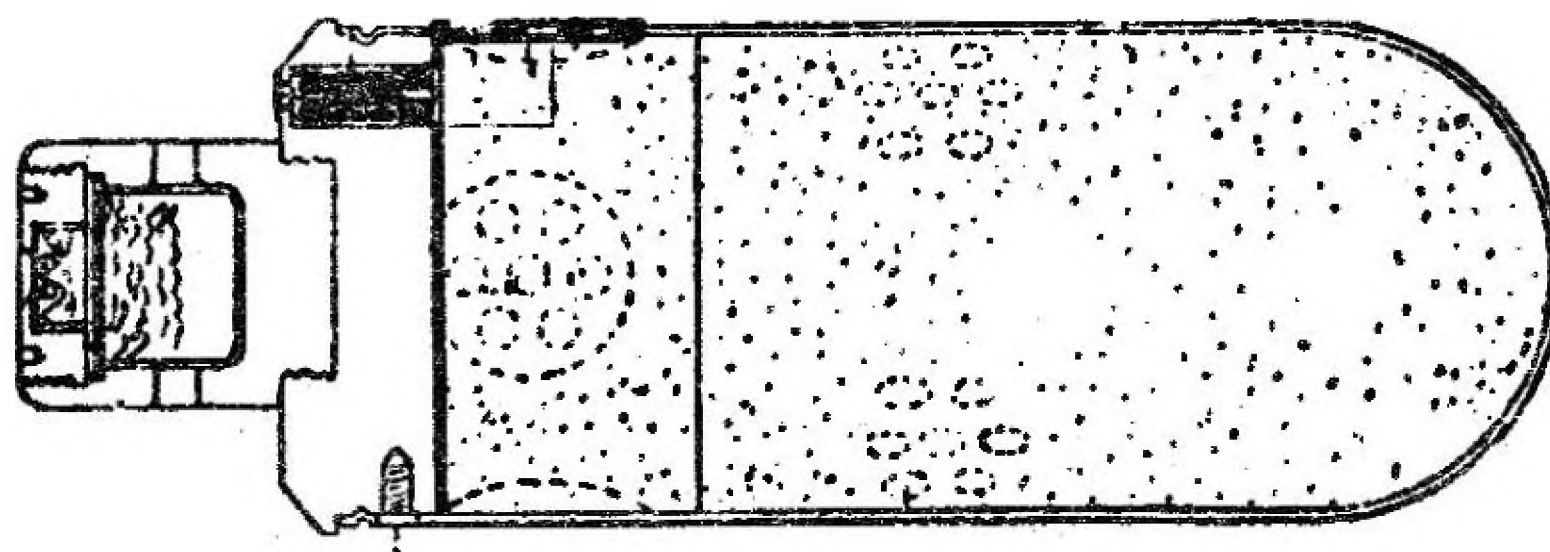
*Fuzing:* 10th Year Type Time Hand Grenade

*Guns Used In:* 10th Year Type Grenade Discharger  
Type 89 Heavy Grenade Discharger

*Remarks:* Illuminating time - 20-30 seconds  
Radius of area illuminated: A - approx. 150 meters  
B - approx. 250 meters  
Equipment Class - 3

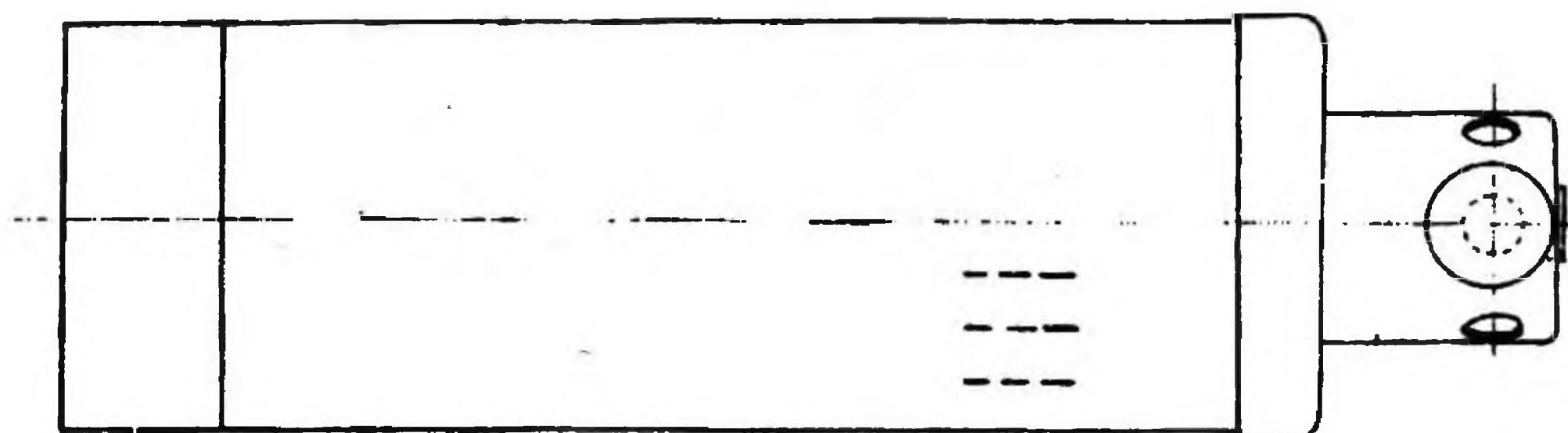


10TH YEAR TYPE ILLUMINATING PROJECTILE A



10TH YEAR TYPE ILLUMINATING PROJECTILE B

THE SIGNAL SHELL PICTURED IS TYPICAL OF ALL  
FLARE-TYPE 10TH YEAR TYPE SIGNAL SHELLS



10TH YEAR TYPE GRENADE DISCHARGER SIGNAL SHELLS



*Diameter:* 50 mm

*Designation:* 10th Year Type Signal Shell, Red Single  
Shooting Star

*Color and Markings:* ●

*Total Weight:* 195 gm

*Guns Used In:* 10th Year Type Grenade Discharger

*Remarks:* Bursting height - 120 meters  
Duration - 5 seconds  
Signal distance: night - 8000 meters  
day - 2000 meters

*Diameter:* 50 mm

*Designation:* 10th Year Type Signal Shell, Red Double  
Shooting Star

*Color and Markings:* ●●

*Total Weight:* 250 gm

*Guns Used In:* 10th Year Type Grenade Discharger

*Remarks:* Bursting height - 120 meters  
Duration - 5 seconds  
Signal distance: night - 8000 meters  
day - 2000 meters

*Diameter:* 50 mm

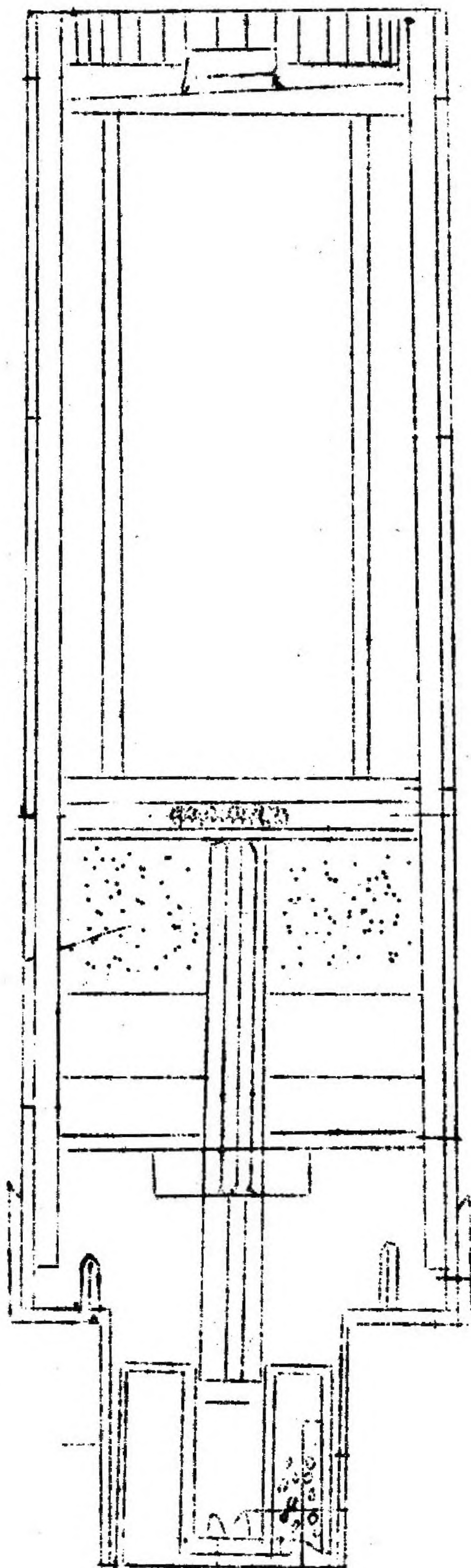
*Designation:* 10th Year Type Signal Shell, Red Triple  
Shooting Star

*Color and Markings:* ●●●

*Total Weight:* 295 gm

*Guns Used In:* 10th Year Type Grenade Discharger

*Remarks:* Bursting height - 120 meters  
Duration - 5 seconds  
Signal distance: night - 8000 meters  
day - 2000 meters



10TH YEAR TYPE SIGNAL SHELL, WHITE SINGLE SHOOTING STAR

*Diameter:* 50 mm

*Designation:* 10th Year Type Signal Shell, White Single  
Shooting Star

*Color and Markings:* ■

*Total Weight:* 180 gm

*Guns Used In:* 10th Year Type Grenade Discharger

*Remarks:* Bursting height - 120 meters

Duration - 5 seconds

Signal distance: night - 8000 meters  
day - 2000 meters

*Diameter:* 50 mm

*Designation:* 10th Year Type Signal Shell, White Double  
Shooting Star

*Color and Markings:* ■ ■

*Total Weight:* 225 gm

*Guns Used In:* 10th Year Type Grenade Discharger

*Remarks:* Bursting height - 120 meters

Duration - 5 seconds

Signal distance: night - 8000 meters  
day - 2000 meters

*Diameter:* 50 mm

*Designation:* 10th Year Type Signal Shell, White Triple  
Shooting Star

*Color and Markings:* ■  
■ ■

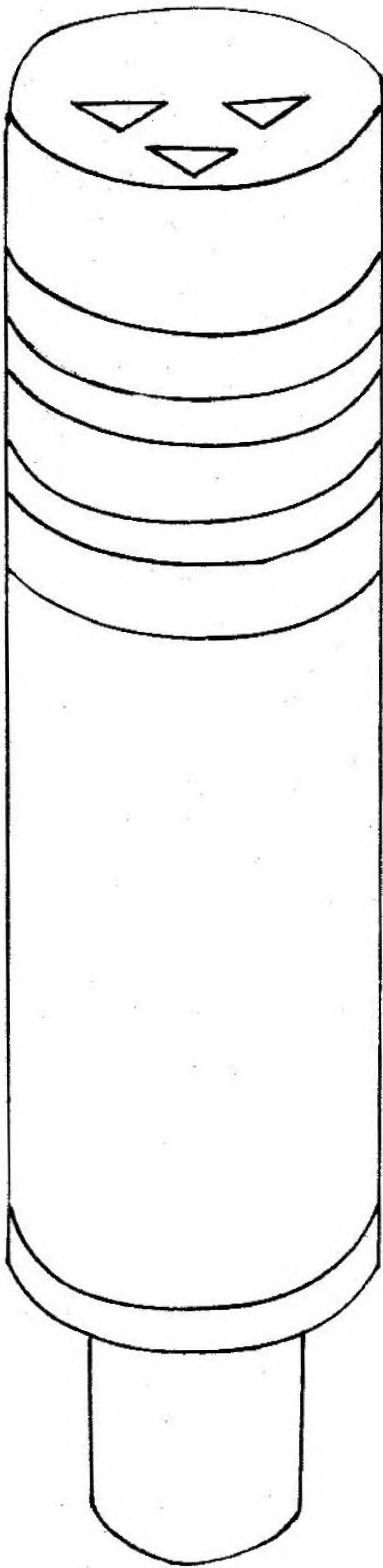
*Total Weight:* 210 gm

*Guns Used In:* 10th Year Type Grenade Discharger

*Remarks:* Bursting height - 120 meters

Duration - 5 seconds

Signal distance: night - 8000 meters  
day - 2000 meters



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 50 mm

*Designation:* 10th Year Type Signal Shell, Green Single  
Shooting Star

*Color and Markings:* ▲

*Total Weight:* 200 gm

*Guns Used In:* 10th Year Type Grenade Discharger

*Remarks:* Bursting height - 120 meters

Duration - 5 seconds

Signal distance: night - 8000 meters

day - 2000 meters

*Diameter:* 50 mm

*Designation:* 10th Year Type Signal Shell, Green Double  
Shooting Star

*Color and Markings:* ▲▲

*Total Weight:* 250 gm

*Guns Used In:* 10th Year Type Grenade Discharger

*Remarks:* Bursting height - 120 meters

Duration - 5 seconds

Signal distance: night - 8000 meters

day - 2000 meters

*Diameter:* 50 mm

*Designation:* 10th Year Type Signal Shell, Green Triple  
Shooting Star

*Color and Markings:* ▲▲▲

*Total Weight:* 305 gm

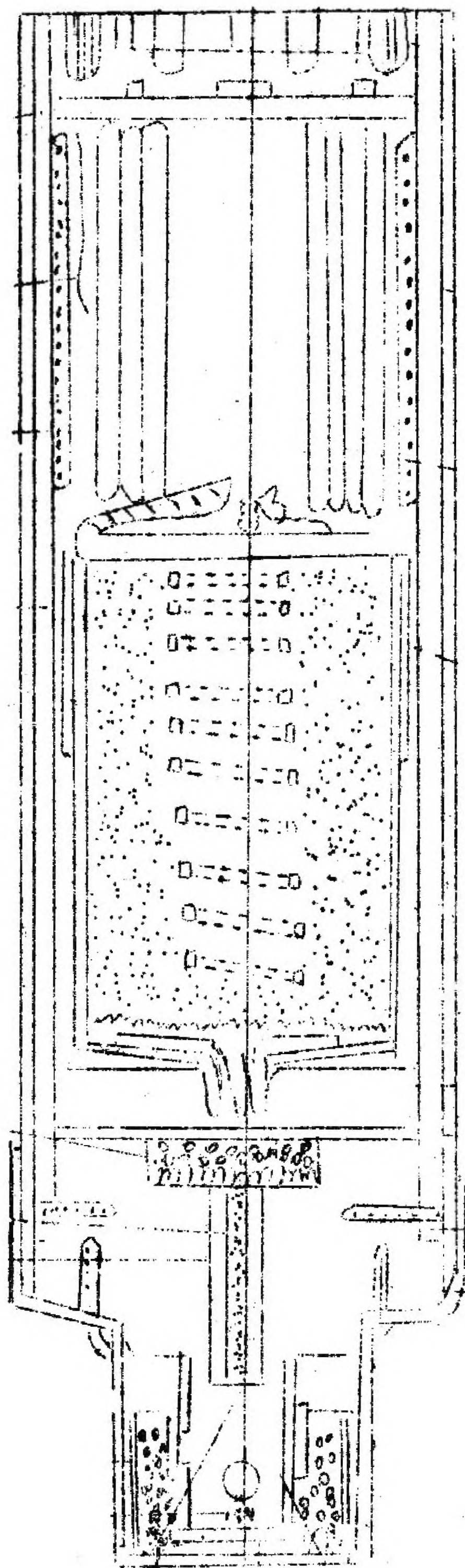
*Guns Used In:* 10th Year Type Grenade Discharger

*Remarks:* Bursting height - 120 meters

Duration - 5 seconds

Signal distance: night - 8000 meters

day - 2000 meters



10TH YEAR TYPE SIGNAL, WHITE PARACHUTE STAR




**JAPANESE PROJECTILES.**  
**CINCPAC-CINCPOA BULLETIN 85-45.**

**CONFIDENTIAL.**  
**30 APRIL 1945.**

*Diameter:* 50 mm

*Designation:* 10th Year Type Signal Shell, Red  
Parachute Star

*Color and Markings:* 

*Total Weight:* 235 gm

*Guns Used In:* 10th Year Type Grenade Discharger

*Remarks:* Red parachute  
Bursting height - 130 meters  
Duration - 20 seconds  
Signal Distance: night - 25000 meters  
day - 3000 meters

*Diameter:* 50 mm

*Designation:* 10th Year Type Signal Shell, Green  
Parachute Star

*Color and Markings:* 

*Total Weight:* 280 gm

*Guns Used In:* 10th Year Type Grenade Discharger

*Remarks:* Green parachute  
Bursting height - 130 meters  
Duration - 20 seconds  
Signal Distance: night - 25000 meters  
day - 3000 meters

*Diameter:* 50 mm

*Designation:* 10th Year Type Signal Shell, White  
Parachute Star

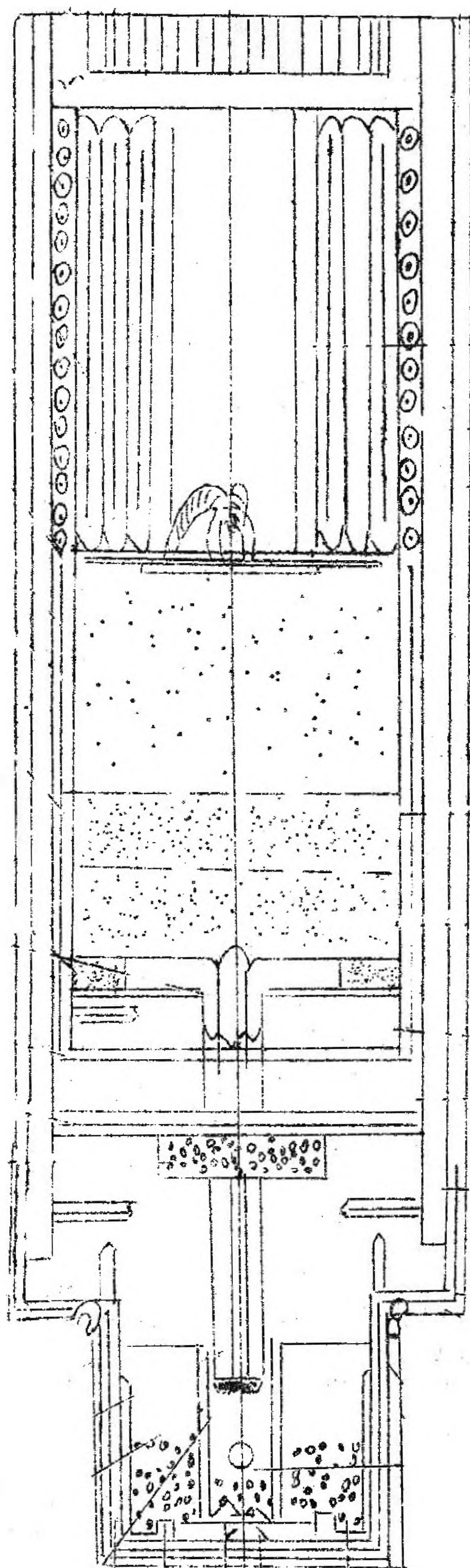
*Color and Markings:* 

*Total Weight:* 280 gm

*Guns Used In:* 10th Year Type Grenade Discharger

*Remarks:* White parachute  
Bursting height - 130 meters  
Duration - 20 seconds  
Signal Distance: night - 25000 meters  
day - 3000 meters





10TH YEAR TYPE SIGNAL SHELL, YELLOW DRAGON

*Diameter:* 50 mm

*Designation:* 10th Year Type Signal Shell, Black Dragon

*Color and Markings:*

*Total Weight:* 290 gm

*Guns Used In:* 10th Year Type Grenade Discharger

*Remarks:* Black parachute  
Bursting height - 130 meters  
Duration - 20 seconds  
Signal distance - 8000 meters  
Long distance daytime signalling

*Diameter:* 50 mm

*Designation:* 10th Year Type Signal Shell, Red Dragon

*Color and Markings:*

*Total Weight:* 270 gm

*Guns Used In:* 10th Year Type Grenade Discharger

*Remarks:* Red parachute  
Bursting height - 130 meters  
Duration - 20 seconds  
Signal distance - 8000 meters  
Long distance daytime signalling

*Diameter:* 50 mm

*Designation:* 10th Year Type Signal Shell, Yellow Dragon

*Color and Markings:*

*Total Weight:* 300 gm

*Guns Used In:* 10th Year Type Grenade Discharger

*Remarks:* Orange parachute  
Bursting height - 130 meters  
Duration - 20 seconds  
Signal distance - 8000 meters  
Long distance daytime signalling

*Diameter:* 50 mm

*Designation:* Type 95 Smoke Projectile

*Color and Markings:*

*Projectile Length:* 110 mm

*Projectile Length With Fuze:* 145.5 mm

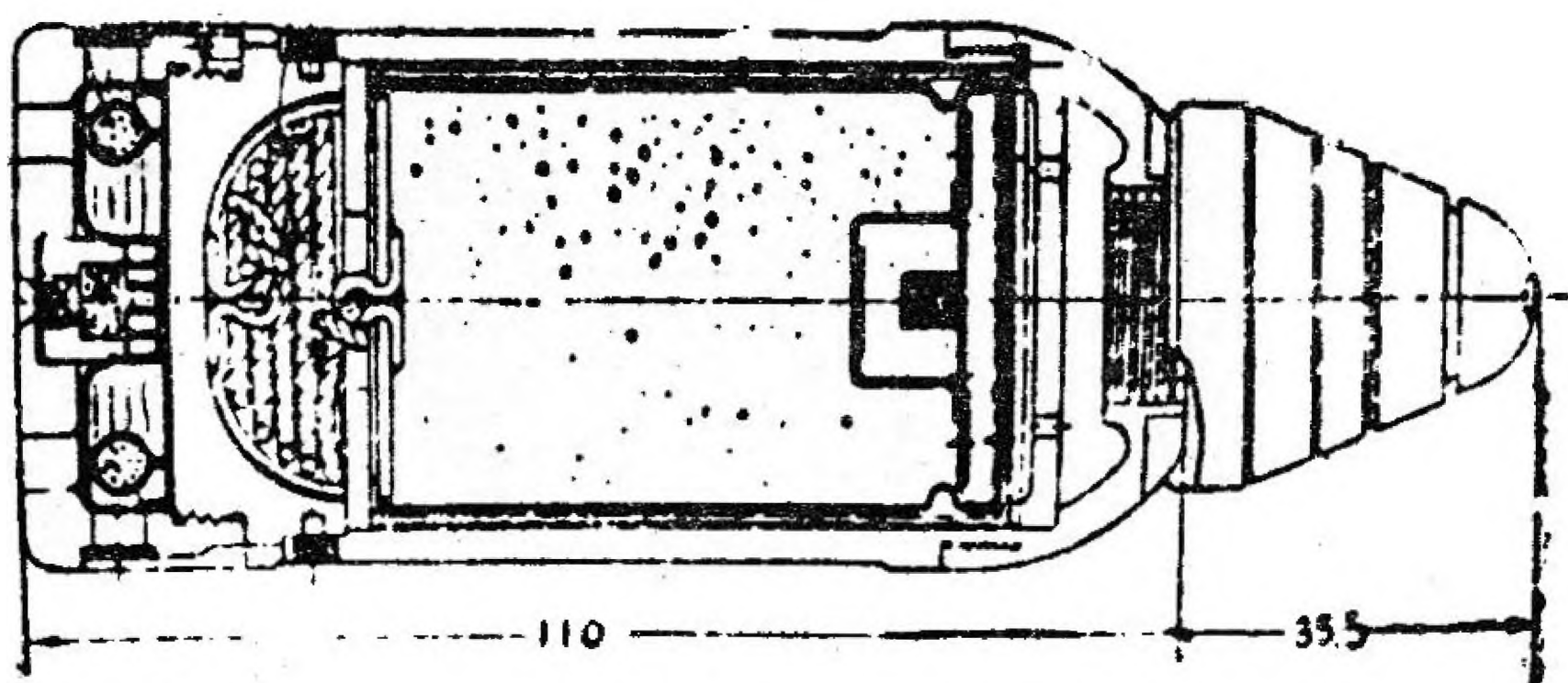
*Projectile Weight:* 1.100 kg

*Weight and Type of Filling:*

*Fuzing:* Type 89 Small Time

*Guns Used In:* Type 89 Heavy Grenade Discharger

*Remarks:* Equipment Class - 1



*Diameter:* 50 mm

*Designation:* 11th Year Type Smoke Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:* 124.5 mm

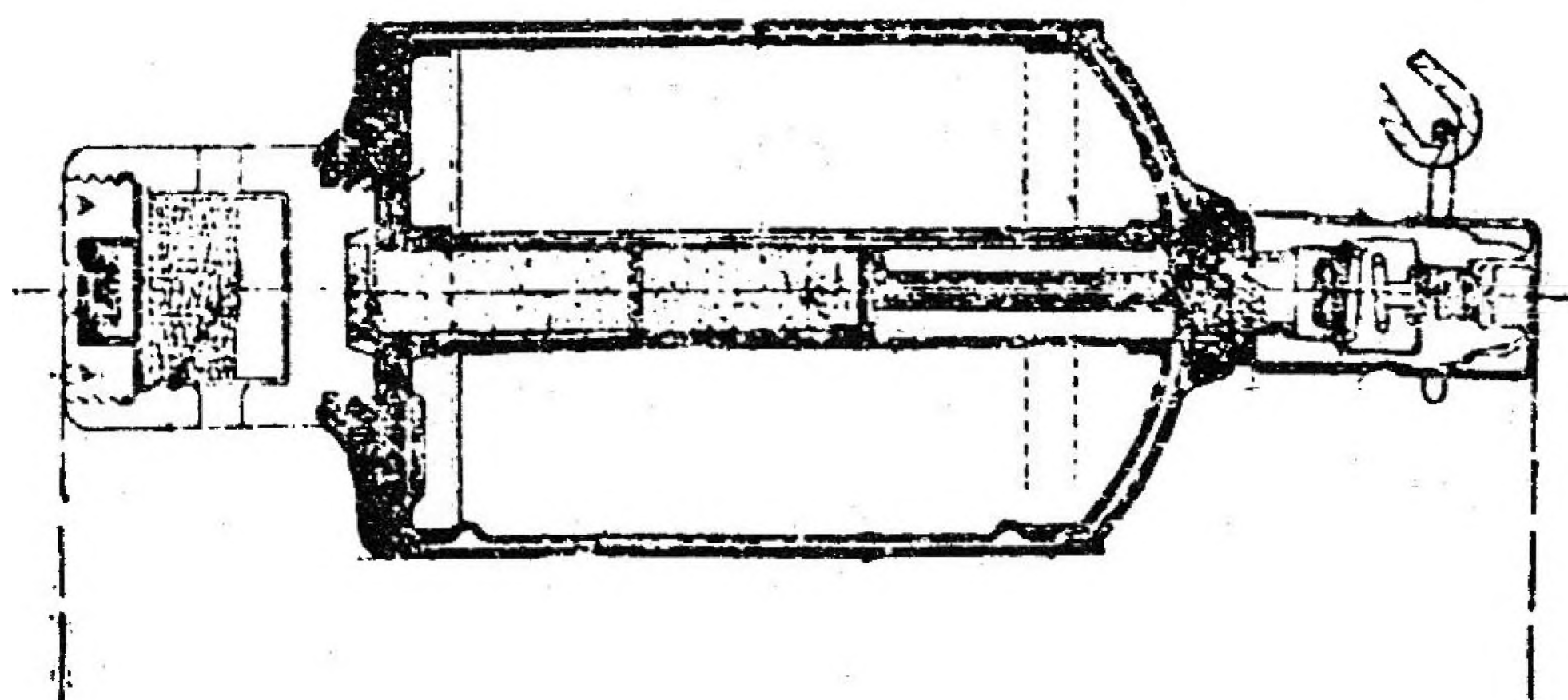
*Projectile Weight:* 540 gm

*Weight and Type of Filling:* Picric acid

*Fuzing:* 10th Year Type Time Hand Grenade

*Guns Used In:* 10th Year Type Grenade Discharger

*Remarks:* Filler also given as ŌNAYAKU  
Equipment Class - 3



*Diameter:* 50 mm

*Designation:* Type 89 HE Projectile

*Color and Markings:*

*Projectile Length:* 110 mm

*Projectile Length With Fuze:* 143 mm

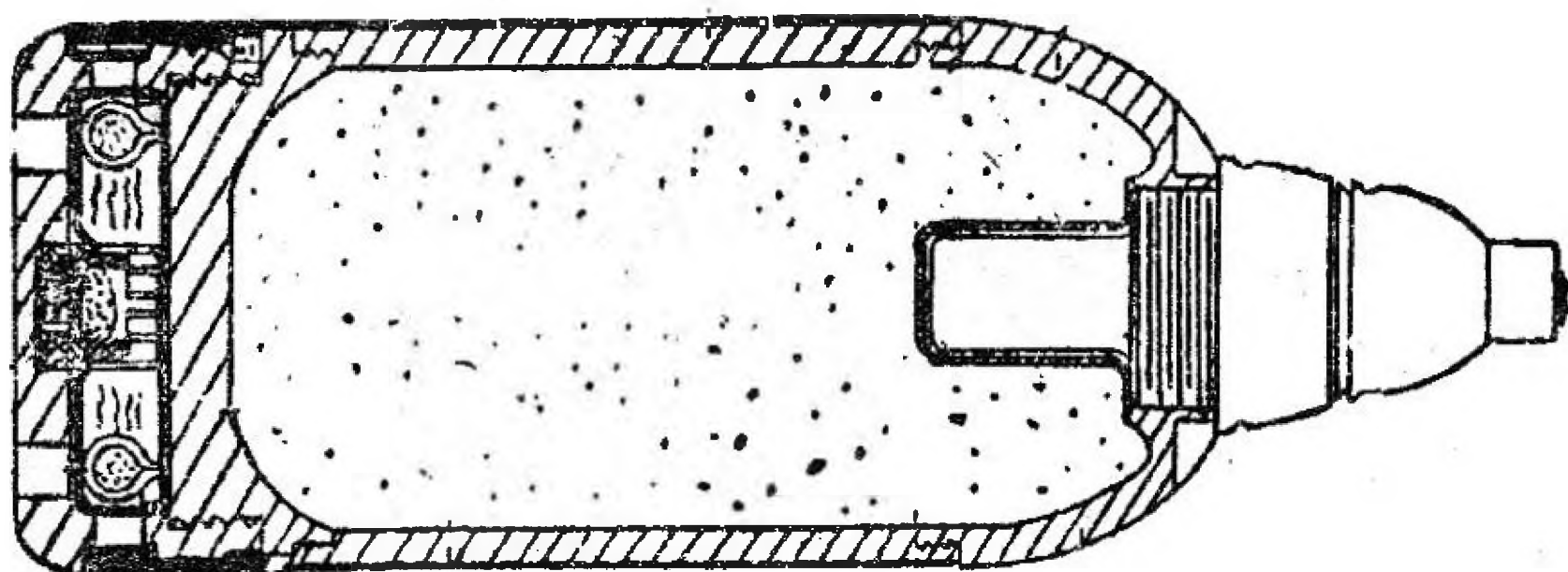
*Projectile Weight:* 808 gm

*Weight and Type of Filling:* TNT (pressed) - 150 gm

*Fuzing:* Type 88 Small Instantaneous

*Guns Used In:* Type 89 Heavy Grenade Discharger

*Remarks:* Effective Radius - approx. 10 meters  
Equipment Class - 1



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 57 mm

*Designation:* Type 90 Substitute Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 2.360 kg

*Weight and Type of Filling:* Fine grain powder - 75 gm

*Fuzing:* Type 88 Instantaneous (Gun)  
Type 88 Short Delay (Gun)

*Guns Used In:* Type 90 5.7 cm Tank Gun  
Type 97 5.7 cm Tank Gun

*Remarks:* Equipment Class - 4



*Diameter:* 57 mm

*Designation:* Type 92 AP Projectile

*Color and Markings:*

*Projectile Length:* 181.5 mm

*Projectile Length With Fuze:*

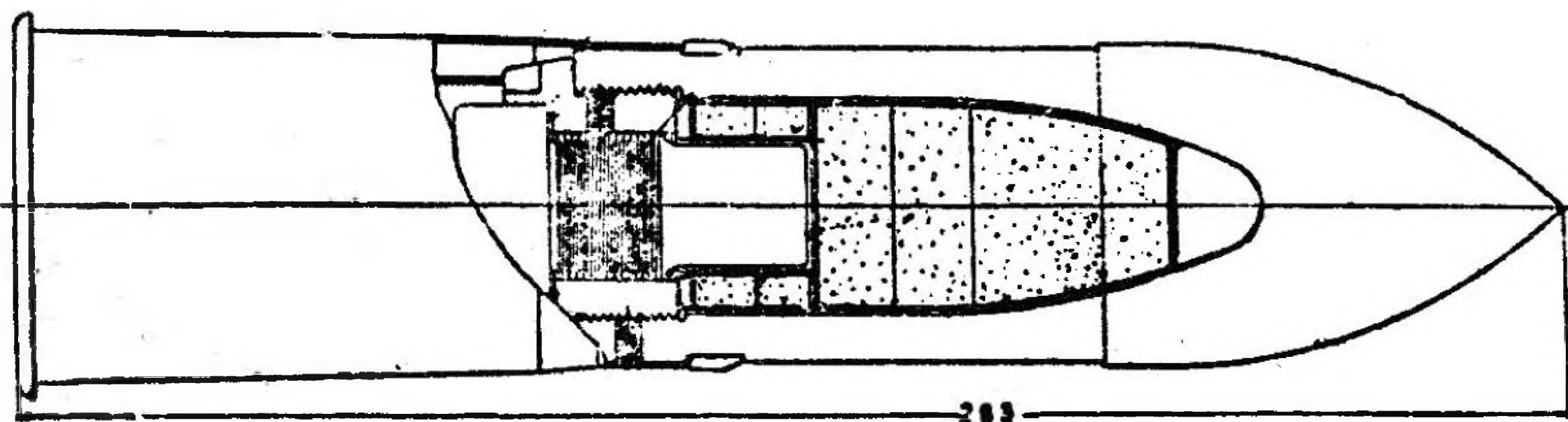
*Projectile Weight:* 2.580 kg

*Weight and Type of Filling:* ŌSHIYAKU - 103 gm

*Fuzing:* Type 92 Small Short Delay Base

*Guns Used In:* Type 90 5.7 cm Tank Gun  
Type 97 5.7 cm Tank Gun

*Remarks:* Filler also given as Picric acid  
Equipment Class - 1





*Diameter:* 57 mm

*Designation:* Type 90 HE Projectile

*Color and Markings:*

*Projectile Length:* 181 mm

*Projectile Length With Fuze:*

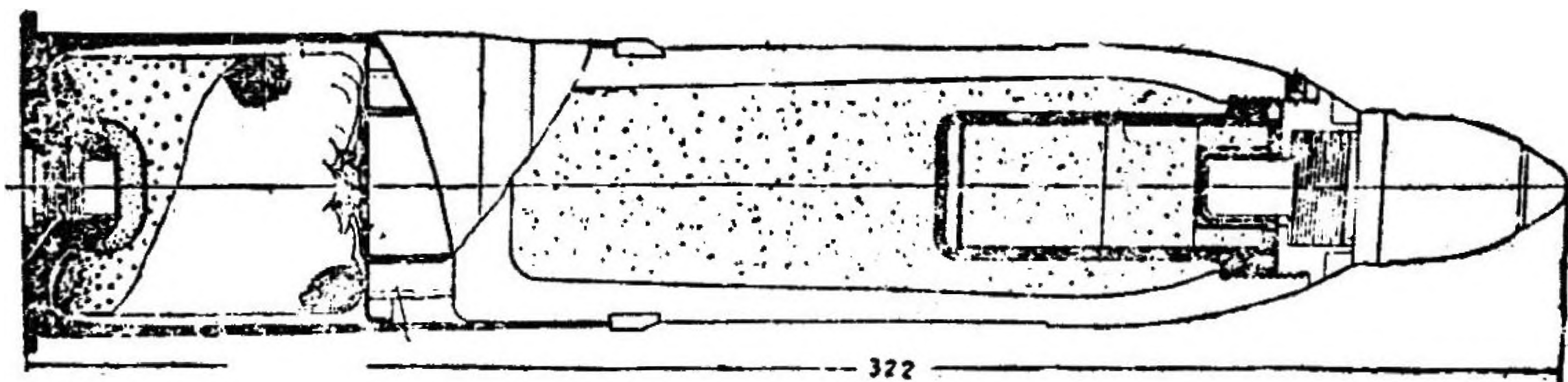
*Projectile Weight:* 2.360 kg

*Weight and Type of Filling:* TNT - 250 gm

*Fuzing:* Type 88 Instantaneous (Gun)  
Type 88 Short Delay (Gun)

*Guns Used In:* Type 90 5.7 cm Tank Gun  
Type 97 5.7 cm Tank Gun

*Remarks:* Class A 40 gm booster tube  
Equipment Class - 1



*Diameter:* 70 mm

*Designation:* Type 92 Substitute Projectile A, B

*Color and Markings:*

*Projectile Length:* 185 mm

*Projectile Length With Fuze:*

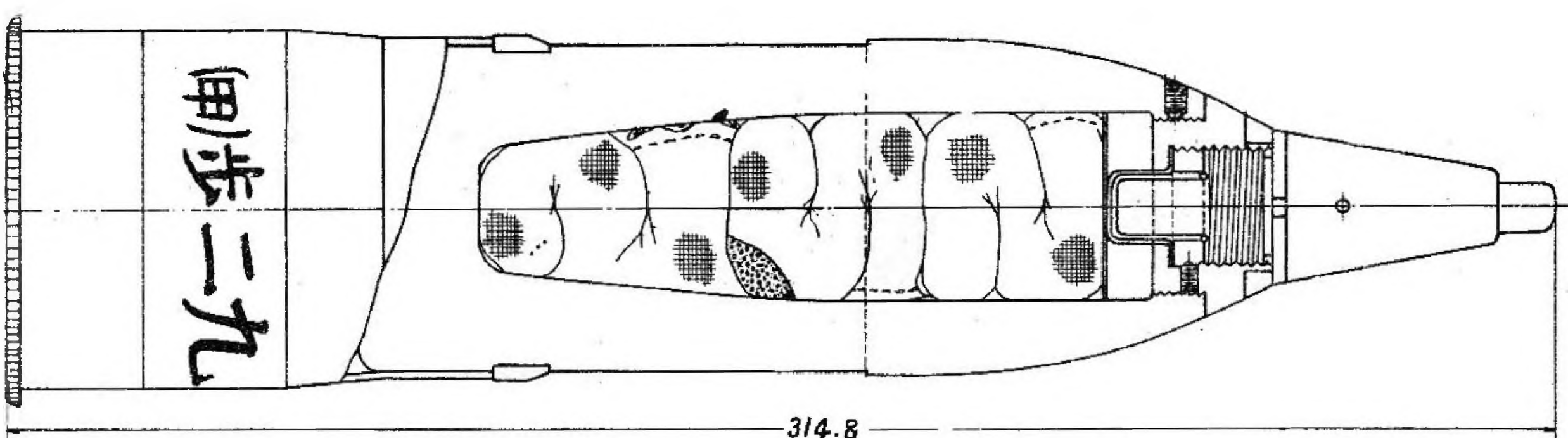
*Projectile Weight:* 3.790 kg

*Weight and Type of Filling:* Fine grain powder - 113 gm

*Fuzing:* Type 88 Instantaneous (Howitzer-Mortar)  
Type 88 Short Delay (Howitzer-Mortar)

*Guns Used In:* Type 92 70 mm Inf Gun

*Remarks:* Same as Type 92 Substitute Projectile for Type  
94 7 cm Tank Gun except for the fuzing  
Equipment Class - 4



TYPE 92 SUBSTITUTE PROJECTILE A

*Diameter:* 70 mm

*Designation:* 11th Year Type Substitute Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

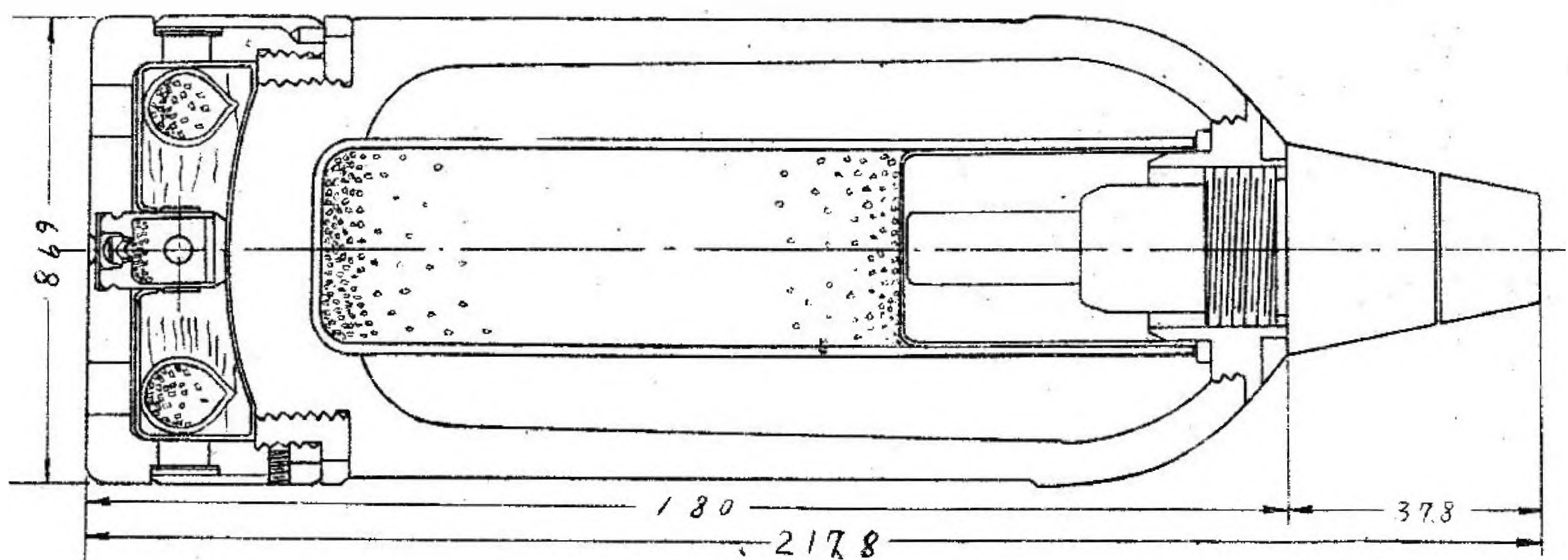
*Projectile Weight:* 2.580 kg

*Weight and Type of Filling:* Fine grain powder - 50 gm

*Fuzing:* Type 93 Instantaneous-Short Delay (Howitzer-Mortar)

*Guns Used In:* 11th Year Type 70 mm Mortar

*Remarks:* Equipment Class - 4



*Diameter:* 70 mm

*Designation:* Type 89 Illuminating Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:* 215 mm

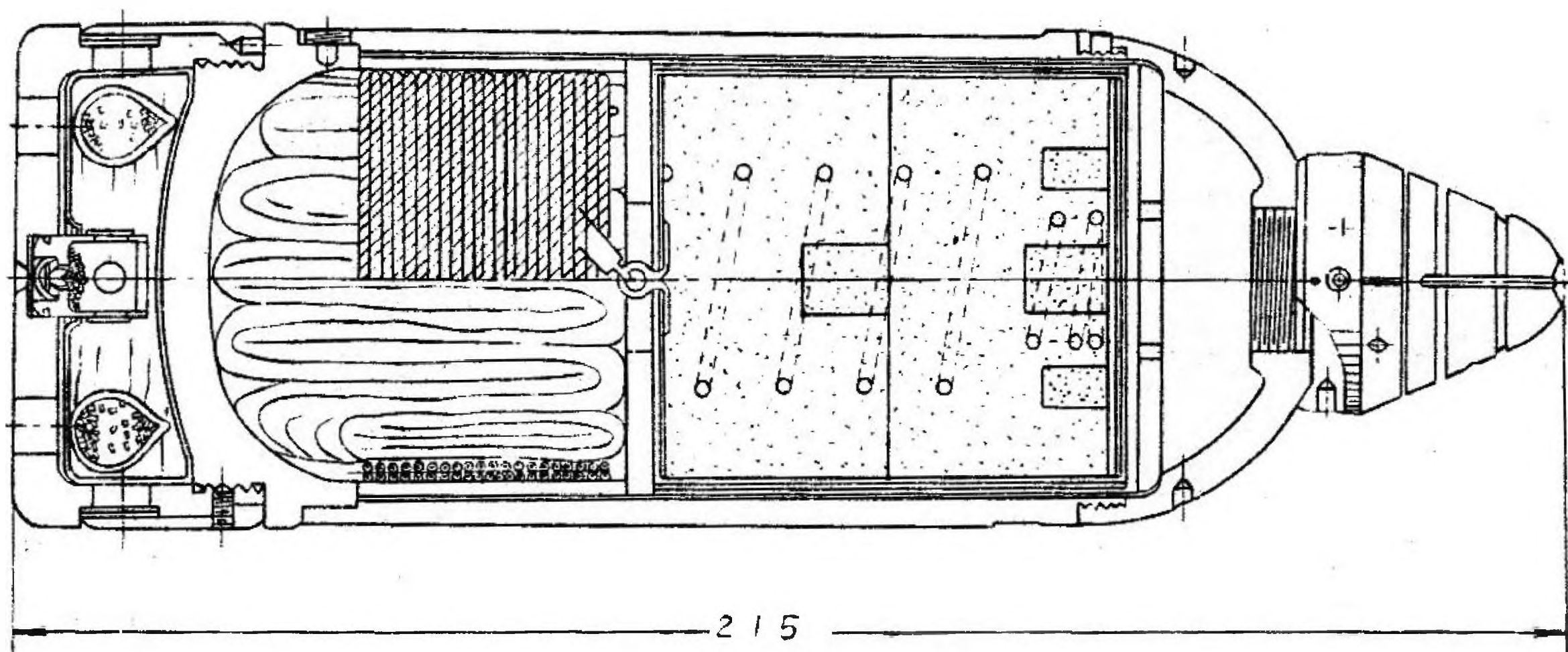
*Projectile Weight:* 2.500 kg

*Weight and Type of Filling:* Illuminating compound - 315 gm  
Igniting compound - 7 gm

*Fuzing:* Type 89 Small Time

*Guns Used In:* 11th Year Type 70 mm Mortar

*Remarks:* Equipment Class - 4





*Diameter:* 70 mm

*Designation:* Type 95 Illuminating Projectile A

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

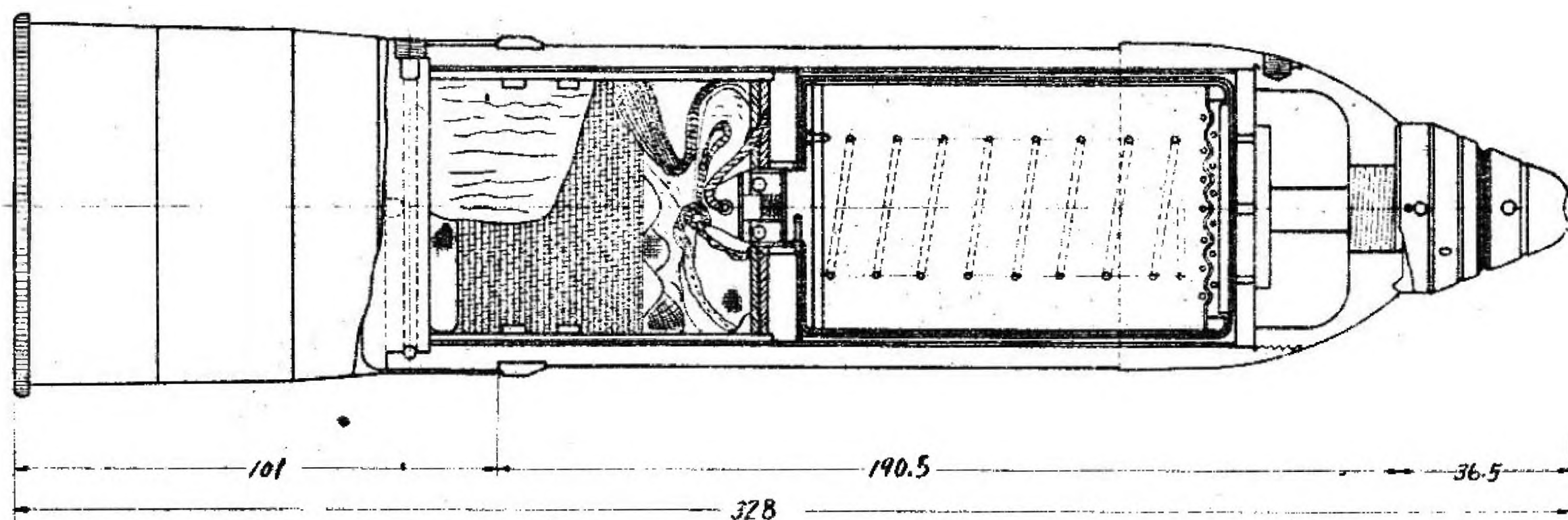
*Projectile Weight:* 3.505 kg

*Weight and Type of Filling:* Illuminating compound - 470 gm

*Fuzing:* Type 89 Small Time

*Guns Used In:* Type 92 70 mm Inf Gun

*Remarks:* Equipment Class - 3



*Diameter:* 70 mm

*Designation:* 11th Year Type Smoke Projectile

*Color and Markings:* Yellow band around upper edge of  
projectile, (ヶ) on shoulder

*Projectile Length:*

*Projectile Length With Fuze:* 214.5 mm

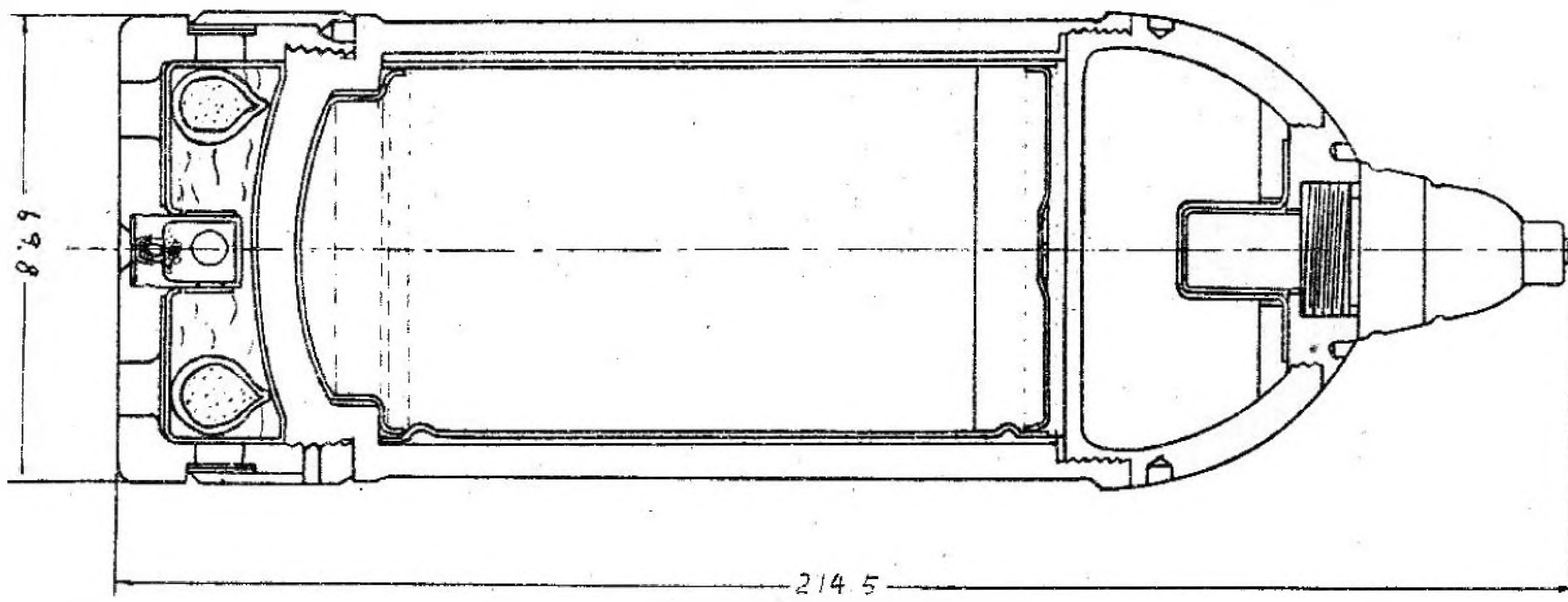
*Projectile Weight:* 2.760 kg

*Weight and Type of Filling:* TNT - 50 gm  
W. P. - 605 gm  
Igniting compound - 5 gm

*Fuzing:* Type 88 Small Instantaneous

*Guns Used In:* 11th Year Type 70 mm Mortar

*Remarks:* Equipment Class - 1



Diameter: 70 mm

Designation: Type 92 HE Projectile A, B

Color and Markings:

Projectile Length:

Projectile Length With Fuze:

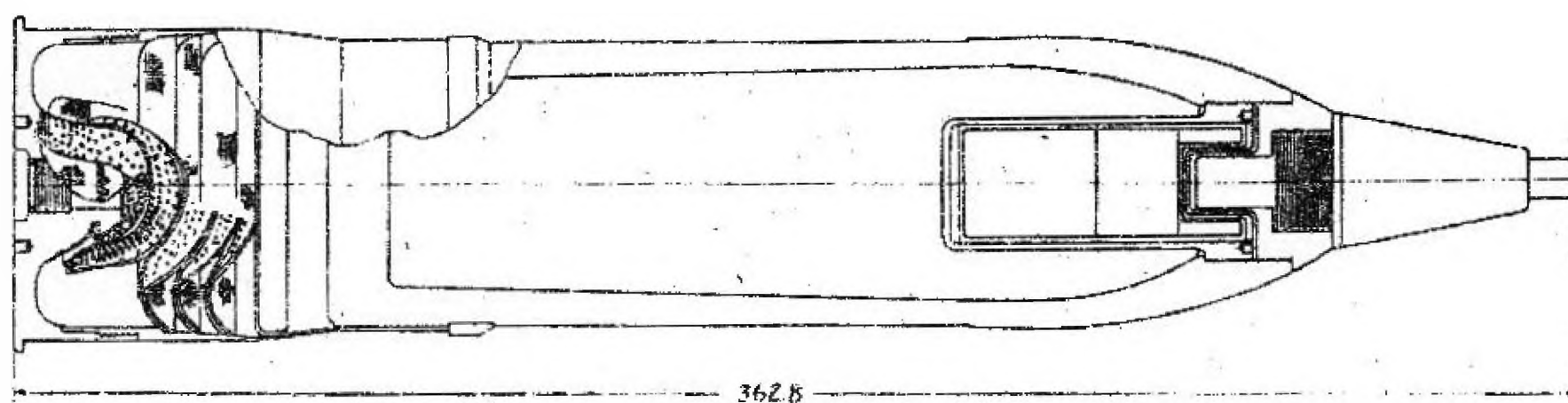
Projectile Weight: 3.790 kg

Weight and Type of Filling: TNT - 590 gm

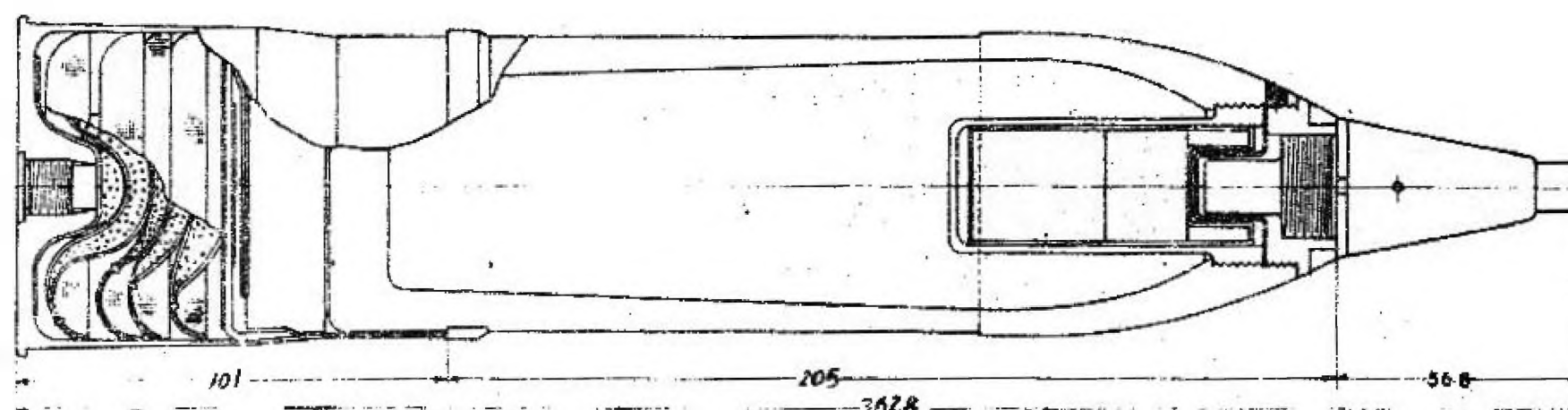
Fuzing: A: Type 88 Instantaneous (Howitzer-Mortar)  
B: Type 88 Short Delay (Howitzer-Mortar)

Guns Used In: Type 92 70 mm Inf Gun

Remarks: Same as Type 92 HE Projectile for Type 94 7 cm Tank Gun except for fuzing.  
Class A 40 gm booster tube  
Mk. 1 SHOTOYAKU (pressed) and Mk. 2 SHOTOYAKU (poured) may be substituted for the TNT (poured).  
Projectile A takes the same shell plug as Type 92 Substitute Projectile  
HEINEIYAKU (poured) may be substituted for the TNT. When this is done the 40 gm SHOUYAKU booster tube is used.  
Projectile B is semi-fixed and the base is painted black.  
Equipment Class - 1



TYPE 92 HE PROJECTILE A



TYPE 92 HE PROJECTILE B



*Diameter:* 70 mm

*Designation:* Type 98 HE Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 3.81 kg

*Weight and Type of Filling:* TNT - 620 gm

*Fuzing:* Type 98 Instantaneous - Short Delay (Howitzer)

*Guns Used In:* Type 92 70 mm Inf Gun

*Remarks:*

*Diameter:* 70 mm

*Designation:* 11th Year Type HE Projectile

*Color and Markings:* White band on lower edge of projectile, yellow band on upper edge.

*Projectile Length:* 180 mm

*Projectile Length With Fuze:* 217.8 mm

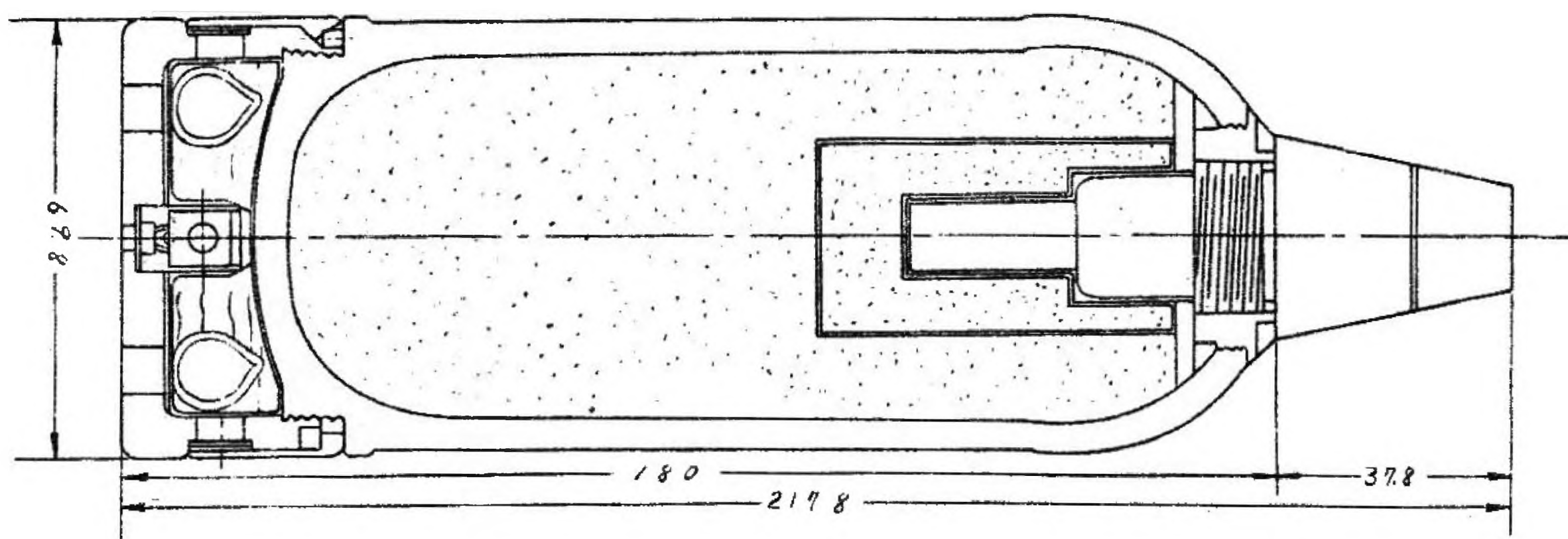
*Projectile Weight:* 2.610 kg

*Weight and Type of Filling:* TNT - 432 gm

*Fuzing:* Type 93 Instantaneous-Short Delay (Howitzer-Mortar)

*Guns Used In:* 11th Year Type 70 mm Mortar

*Remarks:* Equipment Class - 1



Diameter: 70 mm

Designation: Type 97 Semi-steel HE Projectile A

Color and Markings:

Projectile Length:

Projectile Length With Fuze:

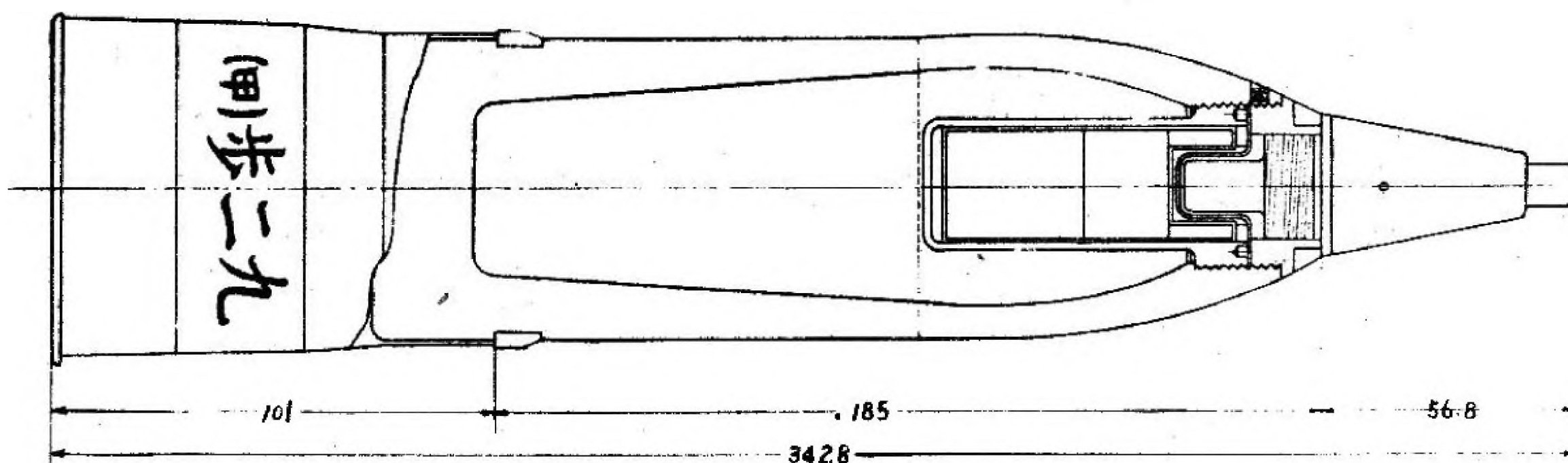
Projectile Weight: 3.920 kg

Weight and Type of Filling: TNT - 370 gm

Fuzing: Type 88 Instantaneous (Howitzer)  
Type 88 Short Delay (Howitzer-Mortar)

Guns Used In: Type 92 70 mm Inf Gun

Remarks: HEINEIYAKU (poured) may be substituted for  
the TNT (poured). When this is done the 40  
gm SHŌUYAKU booster tube is used.  
Equipment Class - 3



*Diameter:* 75 mm

*Designation:* Experimental Propaganda Projectile

*Color and Markings:*

*Projectile Length:* 248.5 mm

*Projectile Length With Fuze:* 306 mm

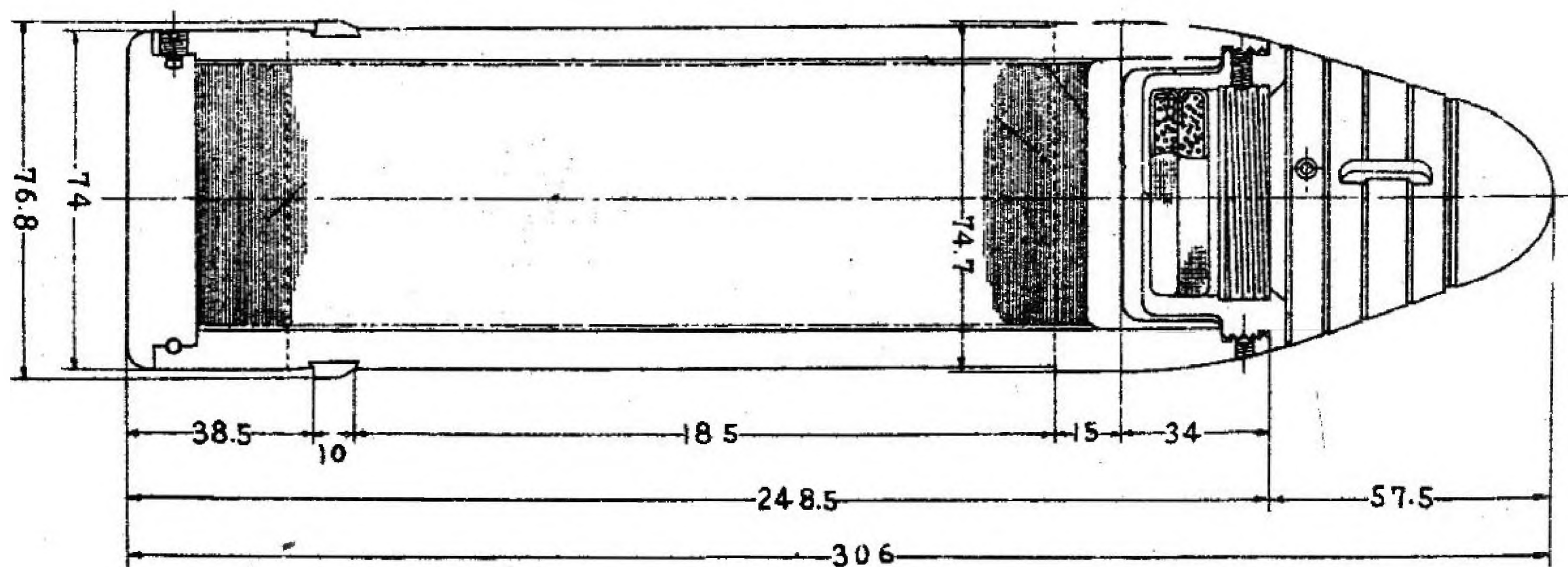
*Projectile Weight:* 5.10 kg

*Weight and Type of Filling:* Fine grain powder - 14 gm

*Fuzing:* 5th Year Type Combination (Modified) (Gun)

*Guns Used In:* Improved Type 38 Field Gun  
Type 38 Field Gun  
Type 41 Cavalry Gun

*Remarks:*



*Diameter:* 75 mm

*Designation:* Time Practice Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:* Type 89 Long-pointed

*Guns Used In:* Type 88 7 cm mobile AA Gun

*Remarks:* Used only for AA firing

*Diameter:* 75 mm

*Designation:* Type 38 Substitute Projectile A

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 6.810 kg

*Weight and Type of Filling:* 113 gm

*Fuzing:* 3rd Year Type Combination (Modified)

*Guns Used In:*

Type 38 Field Gun

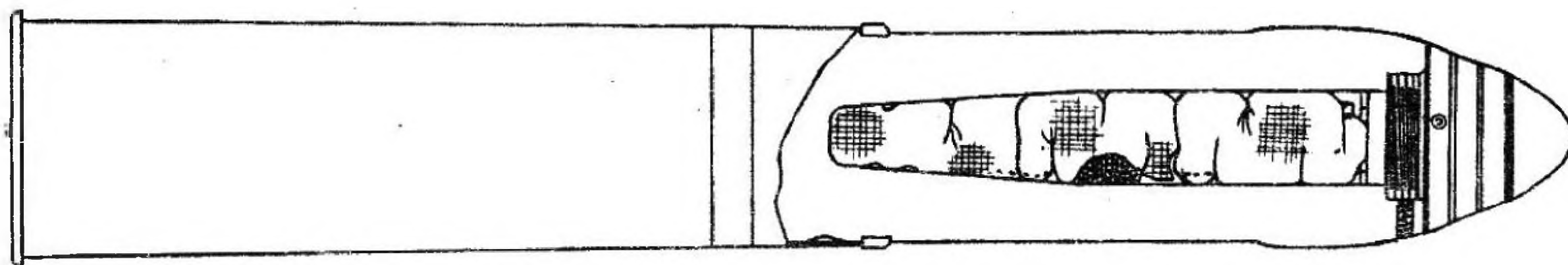
Improved Type 38 Field Gun

Type 41 Cavalry Gun

Type 95 Field Gun

Type 41 Mtn. Gun

*Remarks:*



*Diameter:* 75 mm

*Designation:* Type 38 Substitute Projectile B

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 6.960 kg

*Weight and Type of Filling:* 113 gm

*Fuzing:* Type 88 Instantaneous (Gun)  
Type 88 Short Delay (Gun)

<i>Guns Used In:</i>	Type 41 Cavalry Gun
Type 38 Field Gun	Type 95 Field Gun
Improved Type 38 Field Gun	Type 41 Mtn. Gun

*Remarks:*

*Diameter:* 75 mm

*Designation:* Type 88 Substitute Projectile A, B

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 6.810 kg

*Weight and Type of Filling:* Fine grain powder - 113 gm

*Fuzing:* A: 3rd Year Type Combination (Modified)  
B: Type 88 Instantaneous (Gun)

*Guns Used In:* Type 41 Mtn. Gun

*Remarks:*



*Diameter:* 75 mm

*Designation:* Type 90 Substitute Projectile A

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 6.250 kg or 6.410 kg

*Weight and Type of Filling:* Fine grain powder - 113 gm

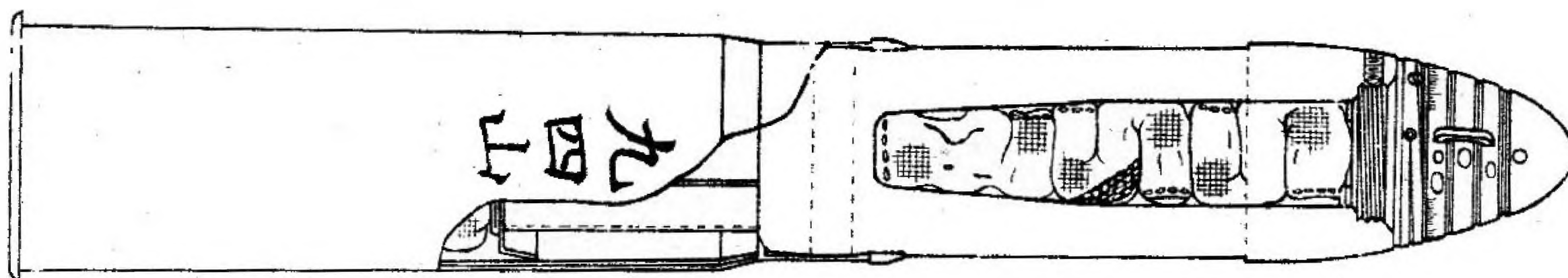
*Fuzing:* 3rd Year Type Combination (Modified)  
5th Year Type Combination (Gun)  
5th Year Type Combination (Modified) (Gun)  
5th Year Type Instantaneous (Modified) (Gun)

*Guns Used In:* Type 38 Field Gun  
Improved Type 38 Field Gun  
Type 41 Cavalry Gun  
Type 41 Mtn. Gun  
Type 88 7 cm Mobile AA Gun  
Type 90 Field Gun  
Type 94 Mtn. Gun  
Type 95 Field Gun

*Remarks:* When the projectile is used in Type 88 7 cm Mobile AA Gun, Type 90 Field gun and Type 94 Mtn. gun, the fuzing is the 5th Year Type Combination (Modified) (Gun). Type 96 5 gm primer is used, and the total weight of the projectile is 6.410 kg.

There are two types of Type 90 Substitute Projectile A: those with a rotating band of 24 mm, and those with a rotating band of a different but unspecified measurement. The former use 5th Year Type Combination Fuze (Modified) (Gun), the latter use the 3d Year Type Combination Fuze (Modified), with the exception of the three guns noted above. The projectiles with a 24 mm rotating band weigh 6.410 kg, those with another rotating band weigh 6.250 kg.

When the Type 96 5 gm primer is used the length of the triangular cardboard spacer is 130 mm.



*Diameter:* 75 mm

*Designation:* Type 90 Substitute Projectile B

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 6.400 kg

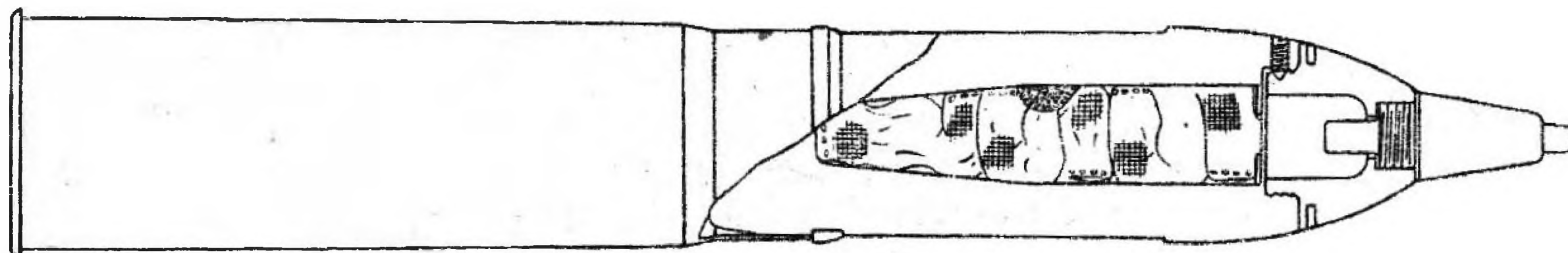
*Weight and Type of Filling:* Fine grain powder - 113 gm

*Fuzing:* Type 88 Instantaneous (Gun)  
Type 88 Short Delay (Gun)

*Guns Used In:* Type 38 Field Gun  
Improved Type 38 Field Gun  
Type 41 Cavalry Gun  
Type 41 Mtn. Gun  
Type 88 7 cm Mobile AA Gun (Special)  
Type 90 Field Gun  
Type 94 Mtn. Gun  
Type 95 Field Gun  
11th Year Type Mobile AA Gun

*Remarks:* There are two types of Type 90 Substitute Projectile B: those with a 24 mm rotating band, and those with a rotating band of a different but unspecified measurement. The projectile has a 24 mm band when used in the Type 90 Field Gun.

The projectile is fitted with a Type B fuze adapter (bar steel).



JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 75 mm

*Designation:* Type 90 Substitute AA Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:* 10th Year Type AA Time

*Guns Used In:* 11th Year Type Mobile AA Gun

*Remarks:*

*Diameter:* 75 mm

*Designation:* Type 90 Substitute Long-pointed AA  
Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 6,270 kg

*Weight and Type of Filling:* Fine grain powder

*Fuzing:* Type 89 Long-pointed AA  
Type 80 Long-pointed AA

*Guns Used In:* Type 88 7 cm Mobile AA Gun

*Remarks:* Equipment Class 4

*Diameter:* 75 mm

*Designation:* Type 92 Substitute Projectile

*Color and Markings:*

*Projectile Length:* 185 mm

*Projectile Length With Fuze:* 241.8 mm

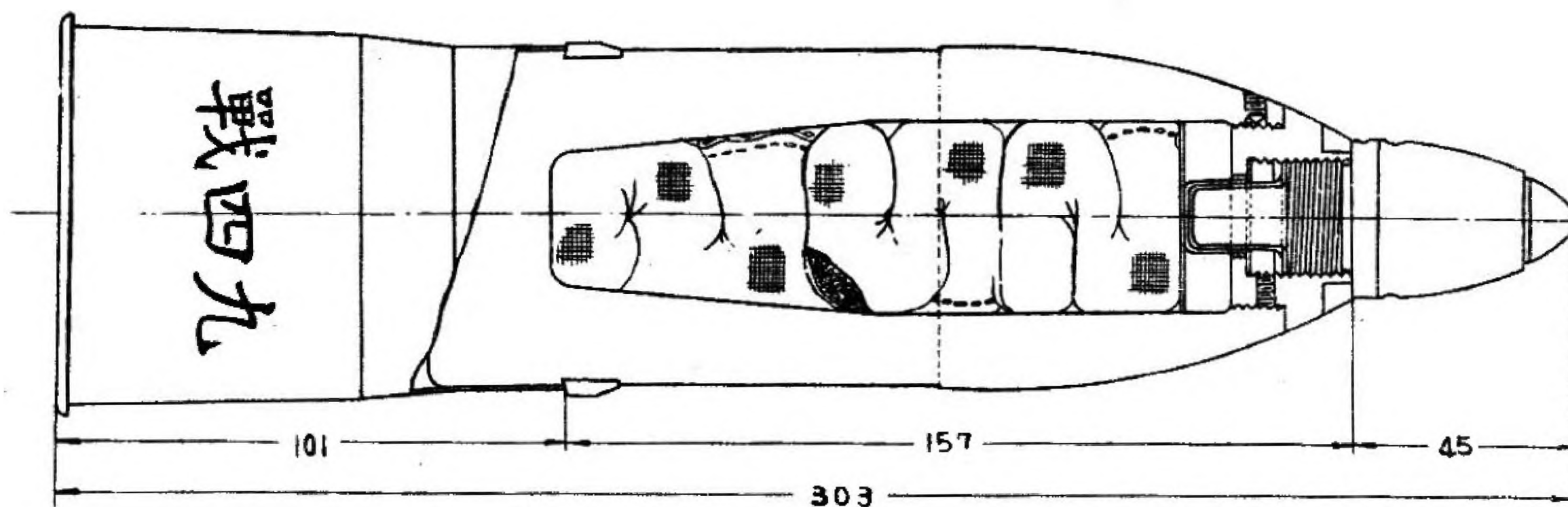
*Projectile Weight:* 3.790 kg

*Weight and Type of Filling:* Fine grain powder - 113 gm

*Fuzing:* Type 88 Instantaneous (Gun)  
Type 88 Short Delay (Gun)

*Guns Used In:* Type 94 7 cm Tank Gun

*Remarks:* Equipment Class - 4



*Diameter:* 75 mm

*Designation:* Type 96 Improved Substitute Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:* 1.52 kg

*Fuzing:* 10th Year Type AA Time

*Guns Used In:* 11th Year Type Mobile AA Gun

*Remarks:*

*Diameter:* 75 mm

*Designation:* Type 96 Improved Substitute Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 5.730 kg

*Weight and Type of Filling:* Sand - 1.52 kg

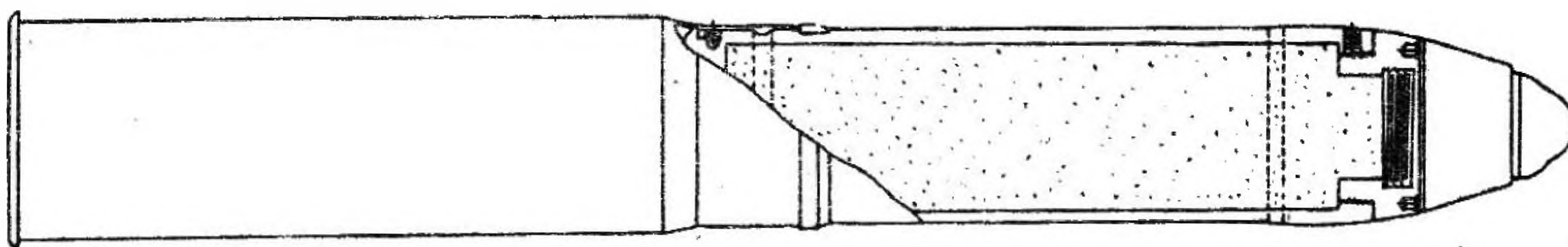
*Fuzing:* Dummy

*Guns Used In:*

	Type 38 Field Gun
Improved Type 38 Field Gun	Type 41 Cavalry Gun
	Type 95 Field Gun

*Remarks:* The 12th Year Type Illuminating projectile is filled with sand to make this practice round.

No new ones will be manufactured.





JAPANESE PROJECTILES.  
CINCPAC-CINCPOA BULLETIN 85-45.

CONFIDENTIAL.  
30 APRIL 1945.

*Diameter:* 75 mm

*Designation:* Type 98 Substitute Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

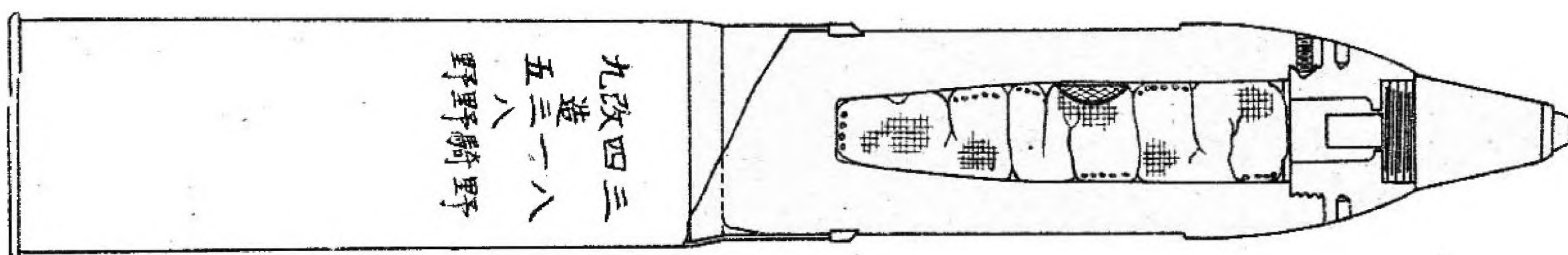
*Projectile Weight:* 6.500 kg

*Weight and Type of Filling:* Fine grain powder - 113 gm

*Fuzing:* Type 98 Instantaneous-Short Delay (Gun)

<i>Guns Used In:</i> Type 38 Field Gun	Type 41 Cavalry Gun
Improved Type 38 Field Gun	Type 41 Mtn. Gun
Type 90 Field Gun	Type 95 Field Gun

*Remarks:*



*Diameter:* 75 mm

*Designation:* 13th Year Type Substitute Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:* 10th Year Type AA Time

*Guns Used In:* 11th Year Type Mobile AA Gun

*Remarks:*

*Diameter:* 75 mm

*Designation:* 13th Year Type Perforated Substitute  
Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

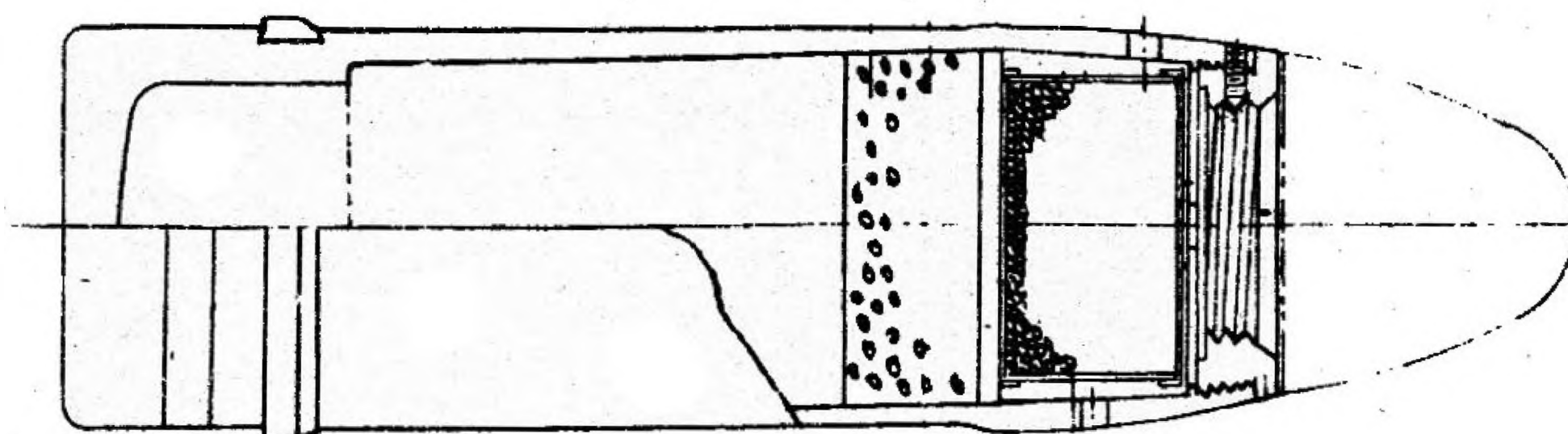
*Projectile Weight:*

*Weight and Type of Filling:* Lead pellets in paraffin

*Fuzing:* 10th Year Type AA Time

*Guns Used In:* 11th Year Type Mobile AA Gun

*Remarks:* Core - zinc  
Equipment Class - 4



*Diameter:* 75 mm

*Designation:* 11th Year Type Target Projectile, Red

*Color and Markings:* ( 赤 ) is painted on the projectile

*Projectile Length:*

*Projectile Length With Fuze:*

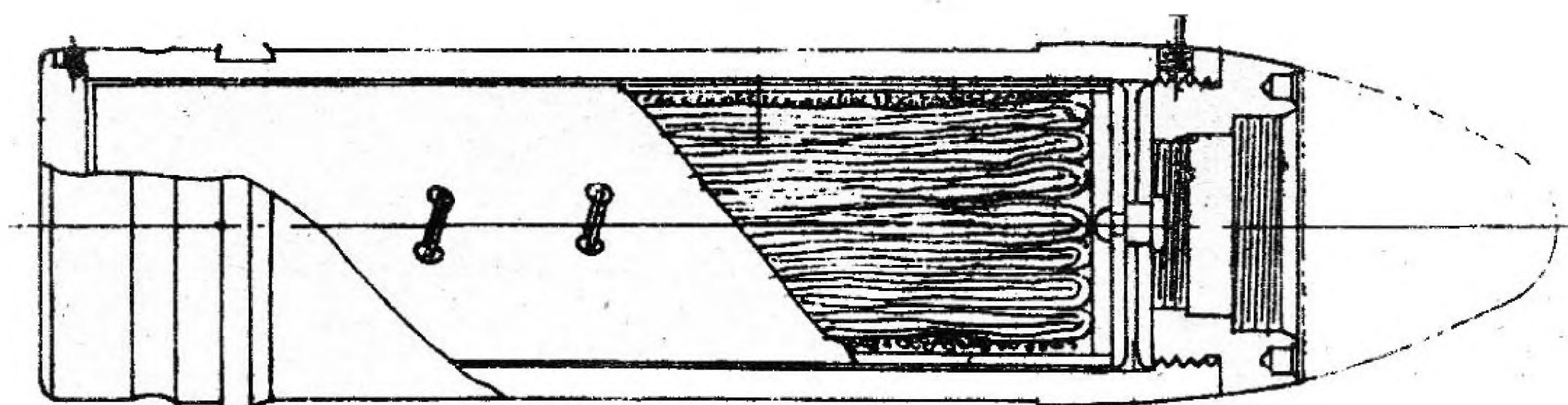
*Projectile Weight:* 5.040 kg

*Weight and Type of Filling:*

*Fuzing:* 10th Year Type AA Time (Low muzzle velocity)

*Guns Used In:* 11th Year Type Mobile AA Gun  
Type 88 7 cm Mobile AA Gun

*Remarks:* Equipment Class - 4



*Diameter:* 75 mm

*Designation:* 11th Year Type Target Projectile, White

*Color and Markings:* ( 白 ) is painted on the projectile

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 5.040 kg

*Weight and Type of Filling:*

*Fuzing:* 10th Year Type AA Time (Low muzzle velocity)

*Guns Used In:* 11th Year Type Mobile AA Gun  
Type 88 7 cm Mobile AA Gun

*Remarks:* Equipment Class - 4

*Diameter:* 75 mm

*Designation:* Type 90 Illuminating Projectile

*Color and Markings:*

*Projectile Length:* 248.5 mm

*Projectile Length With Fuze:* 306.0 mm

*Projectile Weight:* 5.650 kg

*Weight and Type of Filling:* Illuminating compound - 250 gm

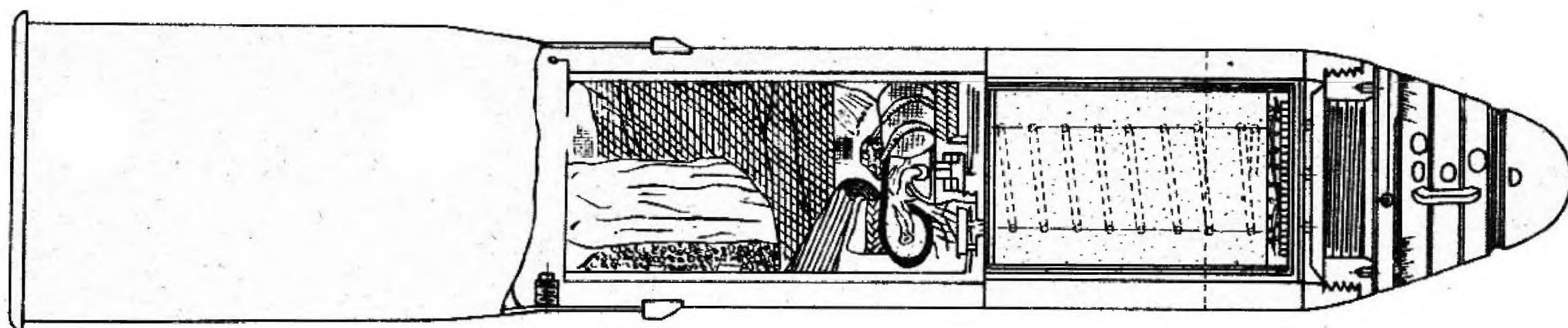
*Fuzing:* 5th Year Type Combination (Modified) (Gun)

*Guns Used In:* Type 38 Field Gun  
Improved Type 38 Field Gun  
Type 41 Cavalry Gun  
Type 41 Mtn. Gun  
Type 88 7 cm Mobile AA Gun (Special)  
Type 90 Field Gun  
Type 94 Mtn. Gun  
Type 95 Field Gun  
11th Year Type Mobile AA Gun

*Remarks:* One document gives the above fuze as a low muzzle velocity type.

Burning Time - 20 seconds

Approx. 90,000 candle power



*Diameter:* 75 mm

*Designation:* 12th Year Type Illuminating Projectile

*Color and Markings:* ( ㄣ ) on shoulder

*Projectile Length:*

*Projectile Length With Fuze:*

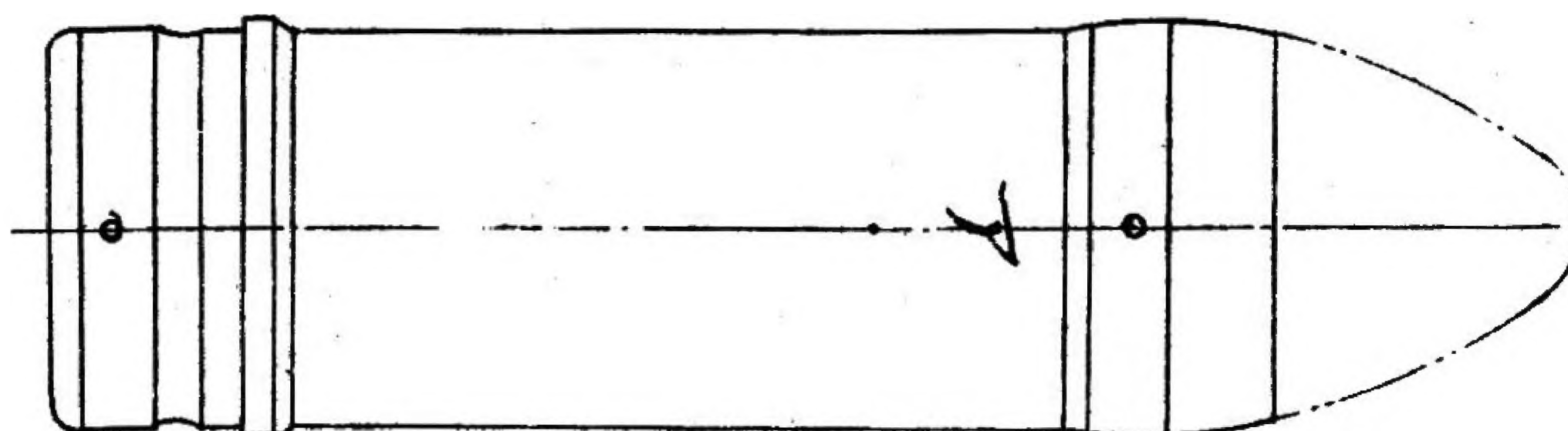
*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 38 Field Gun  
Type 41 Mtn. Gun

*Remarks:*





*Diameter:* 75 mm

*Designation:* 12th Year Type Incendiary Projectile

*Color and Markings:* ( ✕ ) on shoulder

*Projectile Length:*

*Projectile Length With Fuze:*

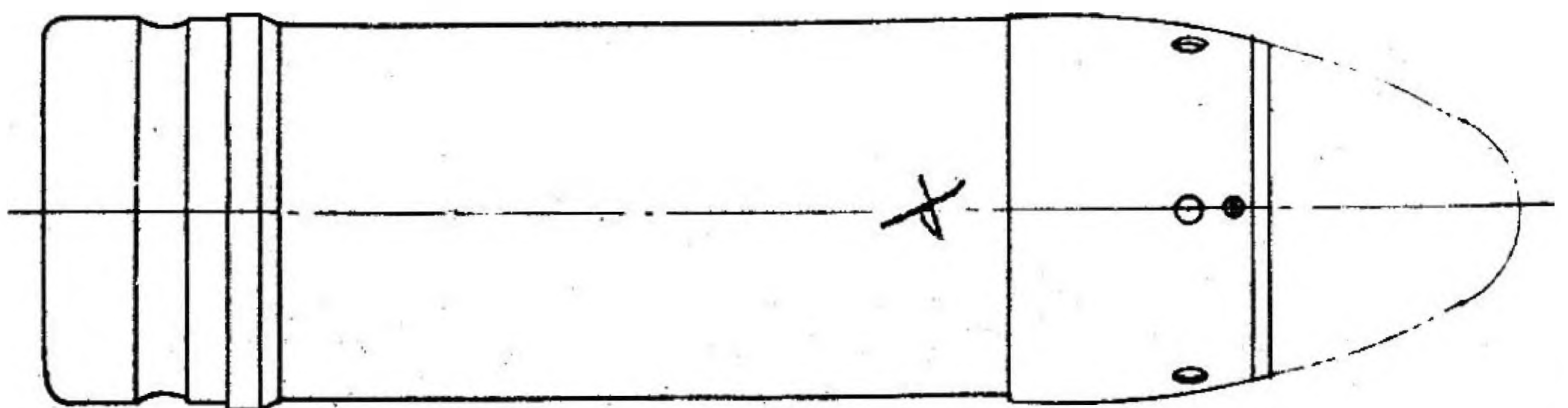
*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* Type 38 Field Gun  
Type 41 Mtn. Gun

*Remarks:*



*Diameter:* 75 mm

*Designation:* Type 90 Incendiary Projectile

*Color and Markings:*

*Projectile Length:* 248.5 mm

*Projectile Length With Fuze:* 306.0 mm

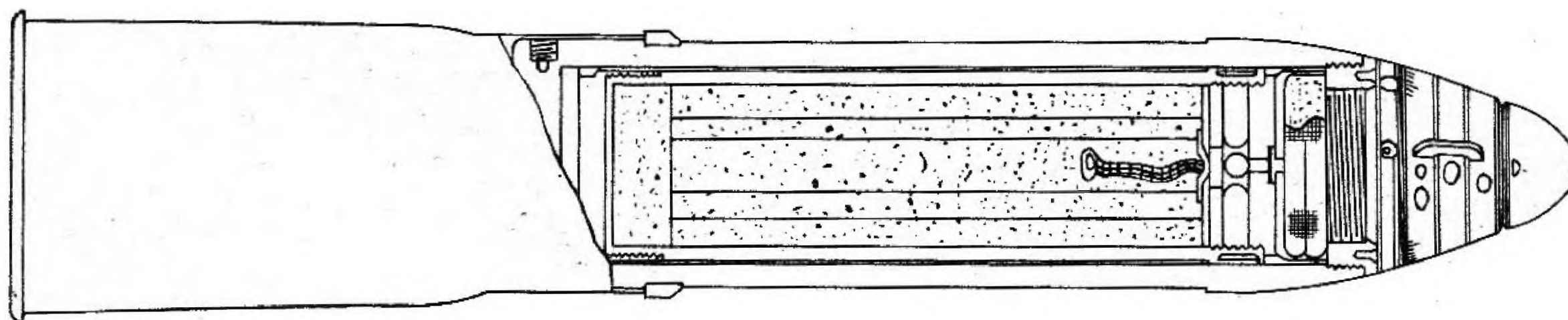
*Projectile Weight:* 6.94 kg

*Weight and Type of Filling:* Igniting compound - 100 gm  
Booster - 264 gm  
Incendiary compound - 530 gm

*Fuzing:* 5th Year Type Combination (Modified) (Gun)

*Guns Used In:* Type 38 Field Gun  
Improved Type 38 Field Gun  
Type 41 Cavalry Gun  
Type 41 Mtn. Gun  
Type 90 Field Gun  
Type 94 Mtn. Gun  
Type 95 Field Gun

*Remarks:* Burning Time - 30 seconds



*Diameter:* 75 mm

*Designation:* Type 90 Smoke Projectile

*Color and Markings:*

*Projectile Length:* 291.5 mm

*Projectile Length With Fuze:* 348.3 mm

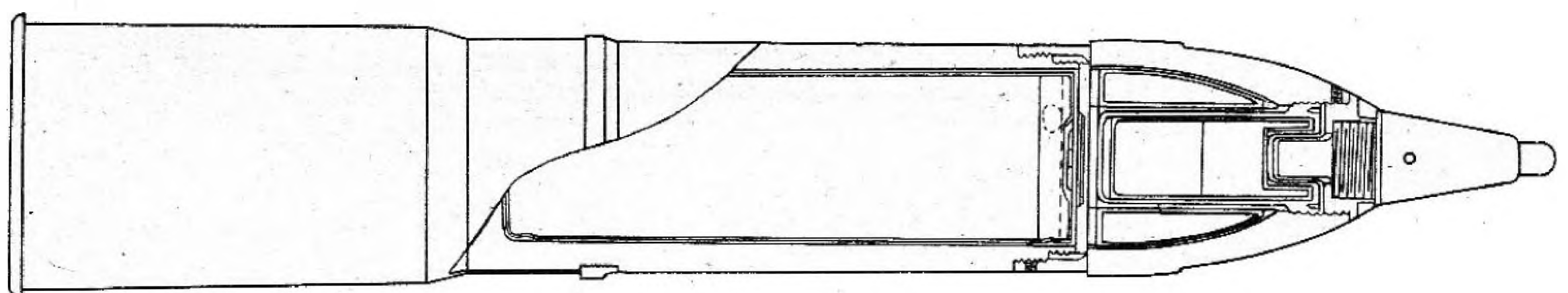
*Projectile Weight:* 5.73 kg

*Weight and Type of Filling:* ONAYAKU - 100 gm  
W. P. - 700 gm

*Fuzing:* Type 88 Instantaneous (Gun)

*Guns Used In:* Type 38 Field Gun  
Improved Type 38 Field Gun  
Type 41 Cavalry Gun  
Type 41 Mtn. Gun  
Type 90 Field Gun  
Type 94 Mtn. Gun  
Type 95 Field Gun

*Remarks:* Class A 40 gm booster tube  
Screen laid is 20 meters high and 20 meters  
wide, lasting for from one to two minutes.



Diameter: 75 mm

Designation: 11th Year Type Smoke Projectile (For Practice)

Color and Markings:

Projectile Length:

Projectile Length With Fuze:

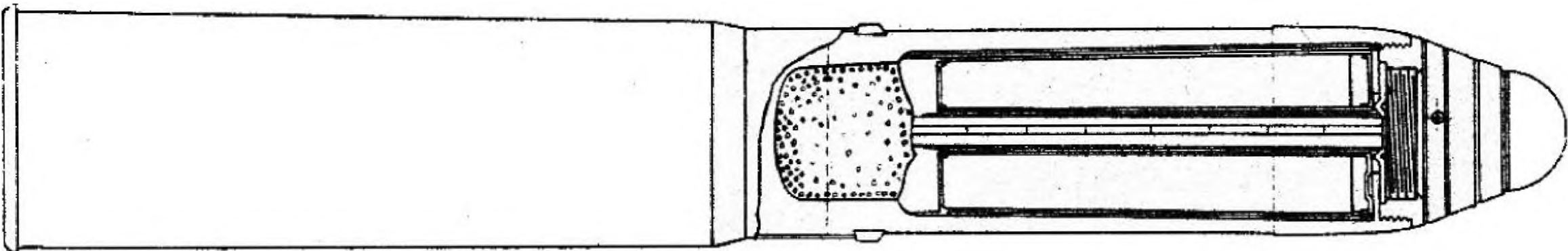
Projectile Weight: 5.400 kg

Weight and Type of Filling: Bursting charge - 70 gm  
W. P. - 740 gm  
ONAYAKU - 20 gm

Fuzing: 3rd Year Type Combination (Modified)

Guns Used In:	Type 41 Cavalry Gun
Type 38 Field Gun	Type 41 Mtn. Gun
Improved Type 38 Field Gun	Type 95 Field Gun

Remarks:



*Diameter:* 75 mm

*Designation:* Type 95 AP Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 4.45 kg

*Weight and Type of Filling:* TNT - 170 gm

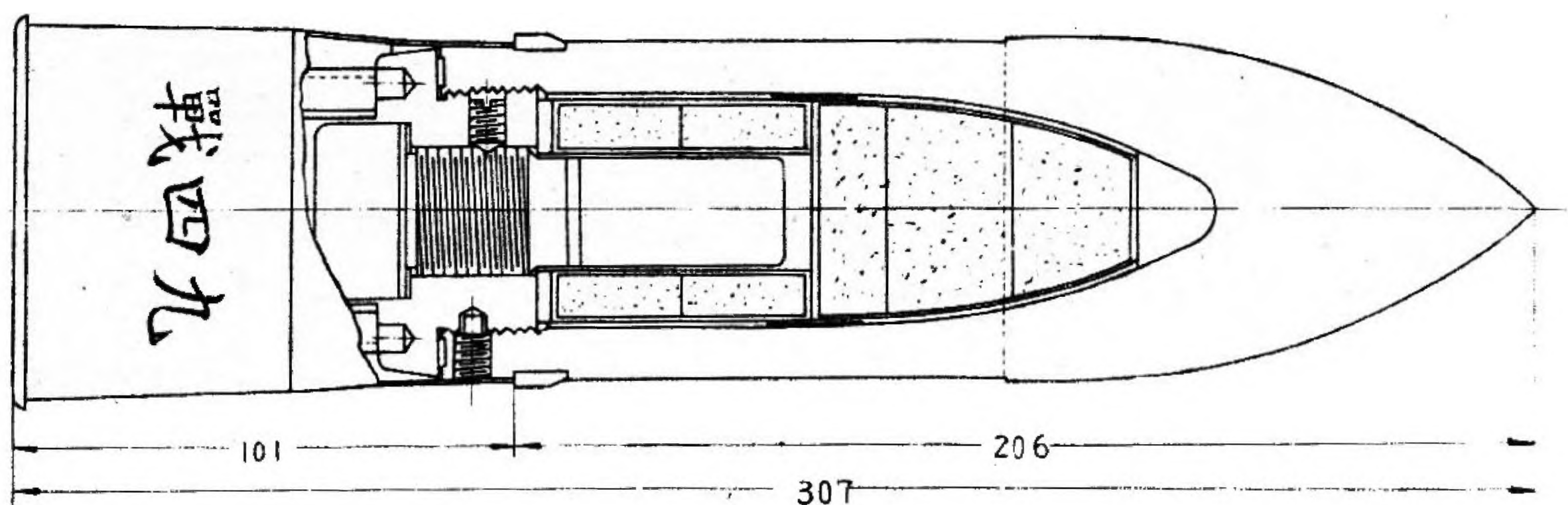
*Fuzing:* Type 95 Small AP Base

*Guns Used In:* Type 94 7 cm Tank Gun

*Remarks:* Class A 40 gm booster tube

Will penetrate 20 mm of steel plate up to  
3,000 meters, and 25 mm of steel plate up to 1000  
meters

ŌSHIYAKU is also listed as a filler  
Equipment Class - 1



*Diameter:* 75 mm

*Designation:* Type 95 Capped AP Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:* TNT - 460 gm

*Fuzing:* Type 95 Capped AP Small Base

*Guns Used In:*

Type 38 Field Gun

Type 41 Cavalry Gun

Improved Type 38 Field Gun

Type 95 Field Gun

*Remarks:*



*Diameter:* 75 mm

*Designation:* Type 1 AP Projectile

*Color and Markings:*

*Projectile Length:* 239.5 mm

*Projectile Length With Fuze:* 261.0 mm

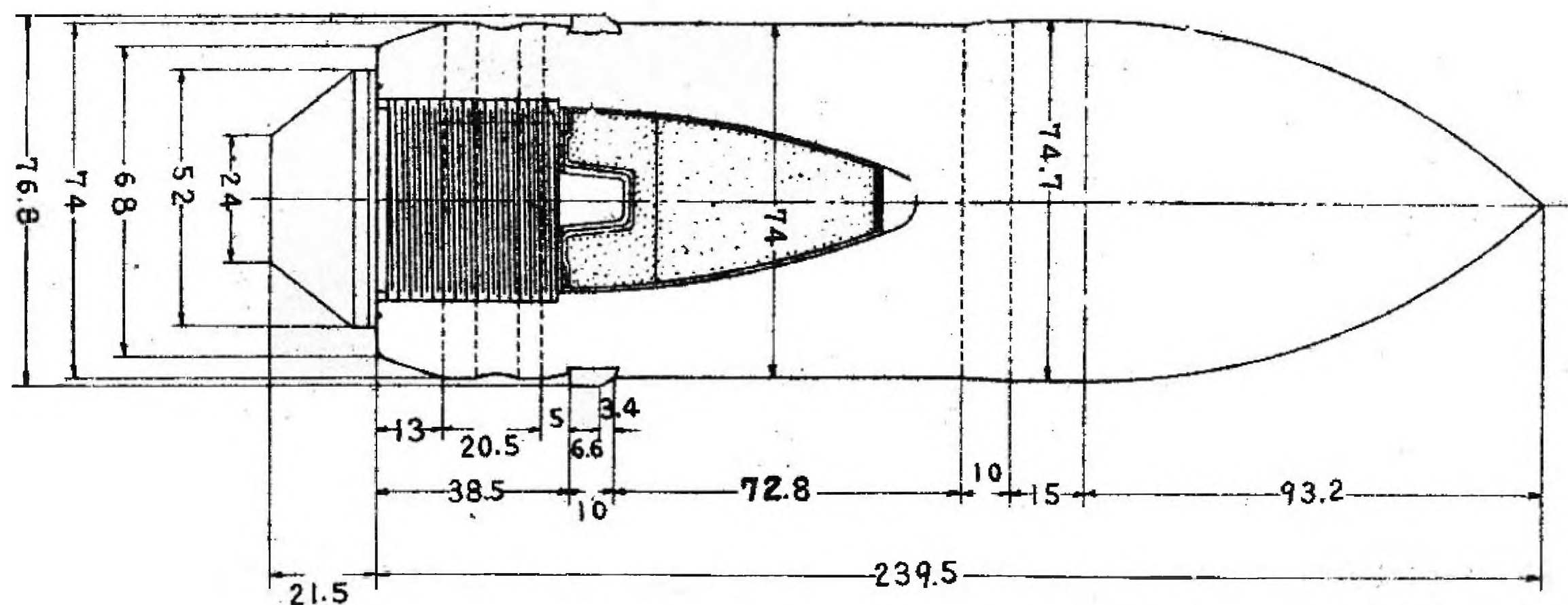
*Projectile Weight:* 6.566 kg

*Weight and Type of Filling:* SHŌUYAKU - 68 gm

*Fuzing:* Type 1 Medium AP Mk. 1 Base

*Guns Used In:* Type 41 Mtn. Gun  
Improved Type 38 Field Gun  
Type 41 Cavalry Gun

*Remarks:*



*Diameter:* 75 mm

*Designation:* Type 95 AP-HE Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

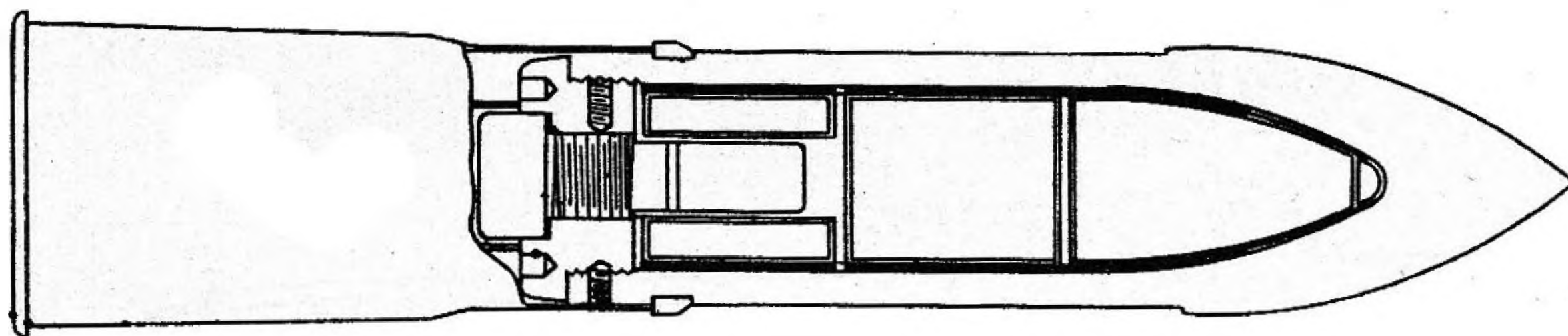
*Projectile Weight:* 6.21 kg

*Weight and Type of Filling:* TNT - 460 gm

*Fuzing:* Type 95 Small AP Base

*Guns Used In:* Type 38 Field Gun  
Improved Type 38 Field Gun  
Type 41 Cavalry Gun  
Type 41 Mtn. Gun  
Type 90 Field Gun  
Type 94 Mtn. Gun  
Type 95 Field Gun  
Type 94 7 cm Tank Gun  
Type 88 7 cm Mobile AA Gun (Special)

*Remarks:* ONAYAKU is also given as a filler  
Will penetrate 20 mm of steel plate up to  
3000 meters.



*Diameter:* 75 mm

*Designation:* Type 38 Shrapnel Projectile

*Color and Markings:*

*Projectile Length:* 234 mm

*Projectile Length With Fuze:* 283.0 mm (3rd Year Type Fuze)  
291.5 mm (5th Year Type Fuze)

*Projectile Weight:* 6.83 kg

*Weight and Type of Filling:* Fine grain powder - 100 gm

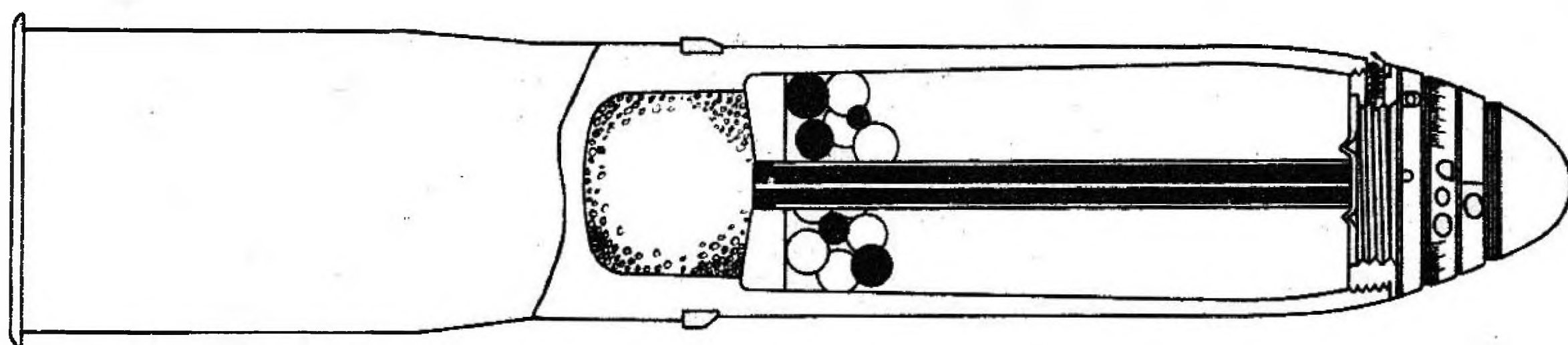
*Fuzing:* 3rd Year Type Combination (Modified)  
Improved 3rd Year Type Combination  
5th Year Type Combination (Modified) (Gun)

*Guns Used In:* Type 38 Field Gun  
Improved Type 38 Field Gun  
Type 41 Cavalry Gun  
Type 41 Mtn. Gun  
Type 88 7 cm Mobile AA Gun (Special)  
Type 90 Field Gun  
Type 94 Mtn. Gun  
Type 95 Field Gun

*Remarks:* The 5th Year Type Combination (Modified) (Gun) fuze is given for use of the projectile in Type 88 7 cm Field AA Gun (Special), Type 90 Field Gun, and Type 94 Mtn. Gun; the Improved 3rd Year Type Combination fuze when used in Type 41 Mtn. Gun and Type 94 Mtn. Gun.

There are approximately 270 pellets in this projectile, each one weighing approximately 10 gm.

When the Type 96 5 gm primer is used the length of the triangular cardboard spacer is 140 mm.



*Diameter:* 75 mm

*Designation:* Type 90 Shrapnel Projectile

*Color and Markings:*

*Projectile Length:* 234 mm

*Projectile Length With Fuze:* 291.5 mm

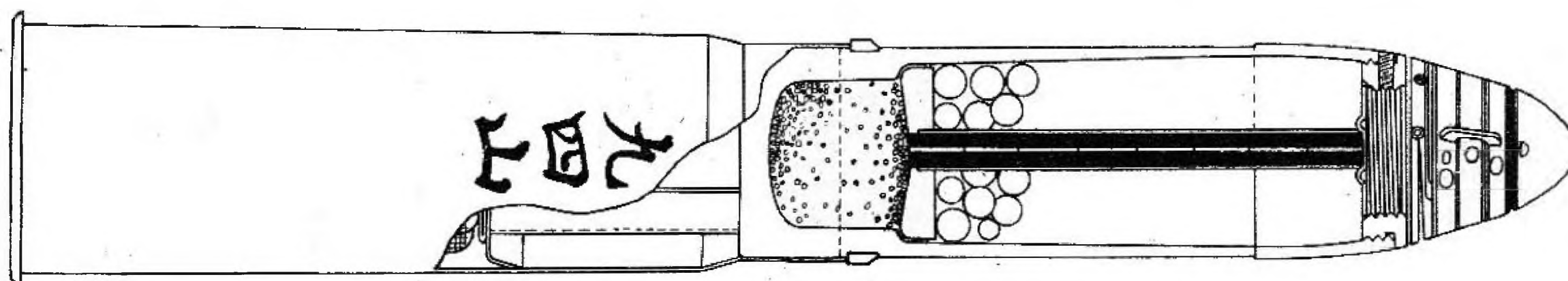
*Projectile Weight:* 7.0 kg

*Weight and Type of Filling:* Fine grain powder - 10 gm

*Fuzing:* 5th Year Type Combination (Modified) (Gun)

*Guns Used In:* Type 38 Field Gun  
Improved Type 38 Field Gun  
Type 41 Cavalry Gun  
Type 41 Mtn. Gun  
Type 88 7 cm Mobile AA Gun (Special)  
Type 90 Field Gun  
Type 94 Mtn. Gun  
Type 95 Field Gun

*Remarks:* When the projectile is used in the Type 90 Field Gun the rotating band is 24 mm.



*Diameter:* 75 mm

*Designation:* Type 94 Shrapnel Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:* Fine grain powder - 100 gm

*Fuzing:* 5th Year Type Combination (Modified) (Gun)

*Guns Used In:* Type 88 7 cm Mobile AA Gun (Special)

*Remarks:*

*Diameter:* 75 mm

*Designation:* 10th Year Type Fragmentation Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

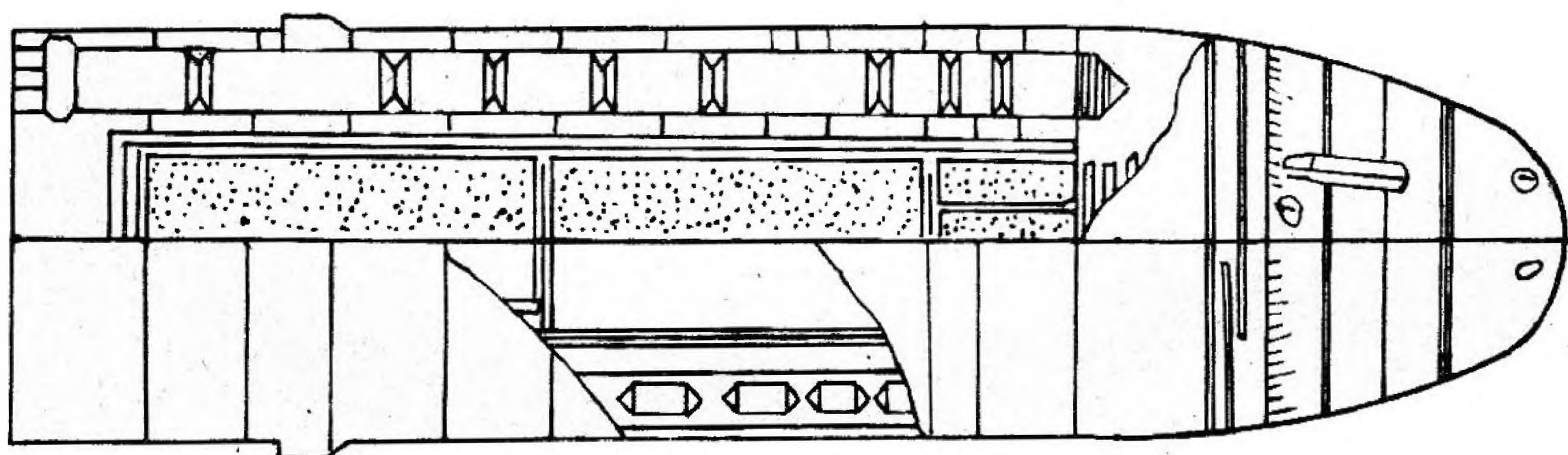
*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:*

*Guns Used In:* 11th Year Type Mobile AA Gun

*Remarks:*





*Diameter:* 75 mm

*Designation:* HE Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:* Type 89 Long-pointed AA  
Type 3, Model 1

*Guns Used In:* Type 88 7 cm Mobile AA Gun

*Remarks:* The Type 89 Fuze is used for AA firing, Type 3 Fuze for AA or level firing.

*Diameter:* 75 mm

*Designation:* HE Projectile A

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:* 318.0 mm

*Projectile Weight:* 6.46 kg

*Weight and Type of Filling:* ŌNAYAKU - 625 gm

*Fuzing:* 3rd Year Type Combination (Modified)  
Improved 3rd Year Type Combination

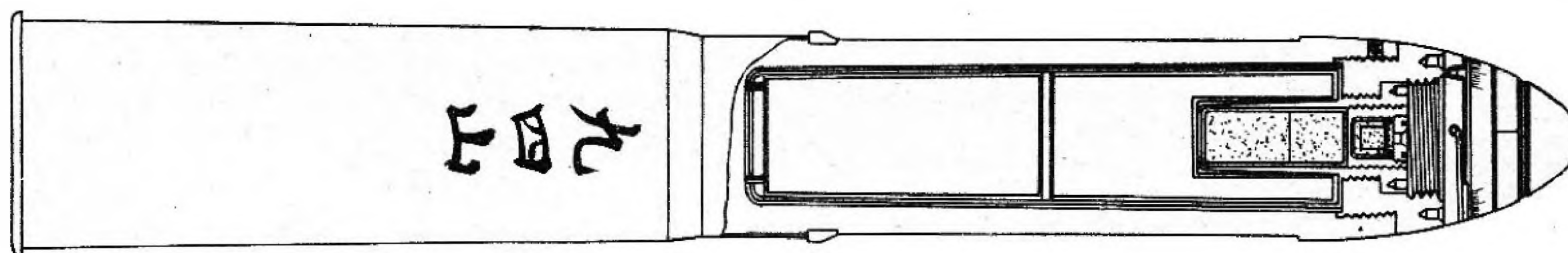
<i>Guns Used In:</i> Type 38 Field Gun	Type 41 Mtn. Gun
Improved Type 38 Field Gun	Type 94 Mtn. Gun
Type 41 Cavalry Gun	Type 95 Field Gun

*Remarks:* Picric acid, TNT, or SHŌTOYAKU may be substituted for the ŌNAYAKU

10th Year Type mercury fulminate plug

27 gm booster tube

The improved 3rd Year Type Combination fuze is listed for the Improved Type 38 Field Gun.



*Diameter:* 75 mm

*Designation:* HE Projectile B

*Color and Markings:*

*Projectile Length:* 269 mm

*Projectile Length With Fuze:* 367.4 mm

*Projectile Weight:* 6.610 kg

*Weight and Type of Filling:* ONAYAKU - 625 gm

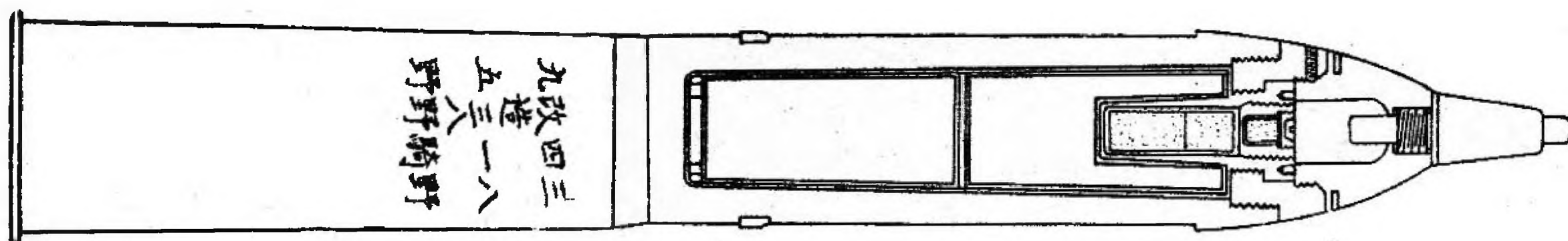
*Fuzing:* Type 88 Instantaneous (Gun)  
Type 88 Short Delay (Gun)

<i>Guns Used In:</i> Type 38 Field Gun	Type 41 Mtn. Gun
Improved Type 38 Field Gun	Type 94 Mtn. Gun
Type 41 Cavalry Gun	Type 95 Field Gun

*Remarks:* Picric acid, TNT (wrapped cast), or Mk. 1 SHOTOYAKU may be substituted for the ONAYAKU

The buffer and buffer plate are the same as for HE Projectile A

Type B fuze adapter (bar steel)  
Type 87 Teteryl plug  
27 gm booster tube



*Diameter:* 75 mm

*Designation:* Type 90 HE Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:* 359.3 mm

*Projectile Weight:* 5.710 kg

*Weight and Type of Filling:* TNT - 900 gm

*Fuzing:* Type 88 Instantaneous (Gun)  
Type 88 Short Delay (Gun)

*Guns Used In:* Type 38 Field Gun  
Improved Type 38 Field Gun  
Type 41 Cavalry Gun  
Type 41 Mtn. Gun  
Type 90 Field Gun  
Type 94 7 cm Tank Gun  
Type 95 Field Gun

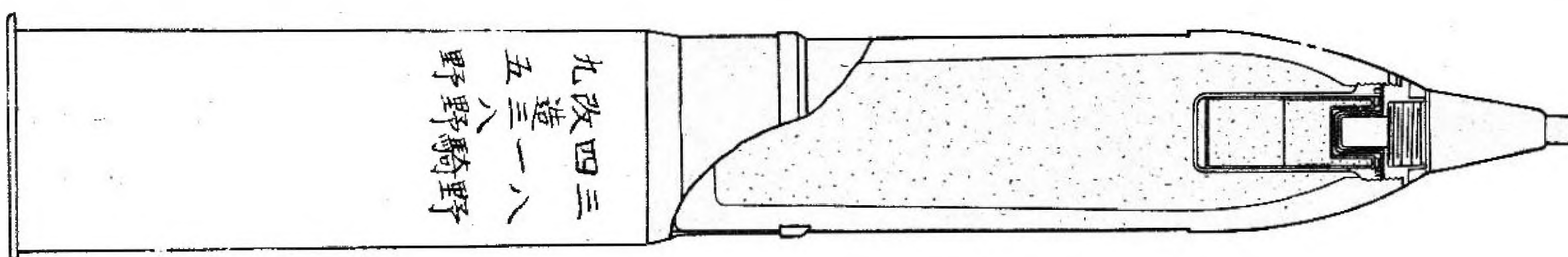
*Remarks:* Mk. 1 SHŌTOYAKU (pressed) or Mk. 2 SHŌTOYAKU (poured) may be substituted for the TNT (poured).

When used in the Type 94 7 cm Tank Gun the weight is given as 3.810 kg.

Class A 40 gm booster tube

Effective Radius - approx. 25 meters

Equipment Class - 1



*Diameter:* 75 mm

*Designation:* Type 92 HE Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

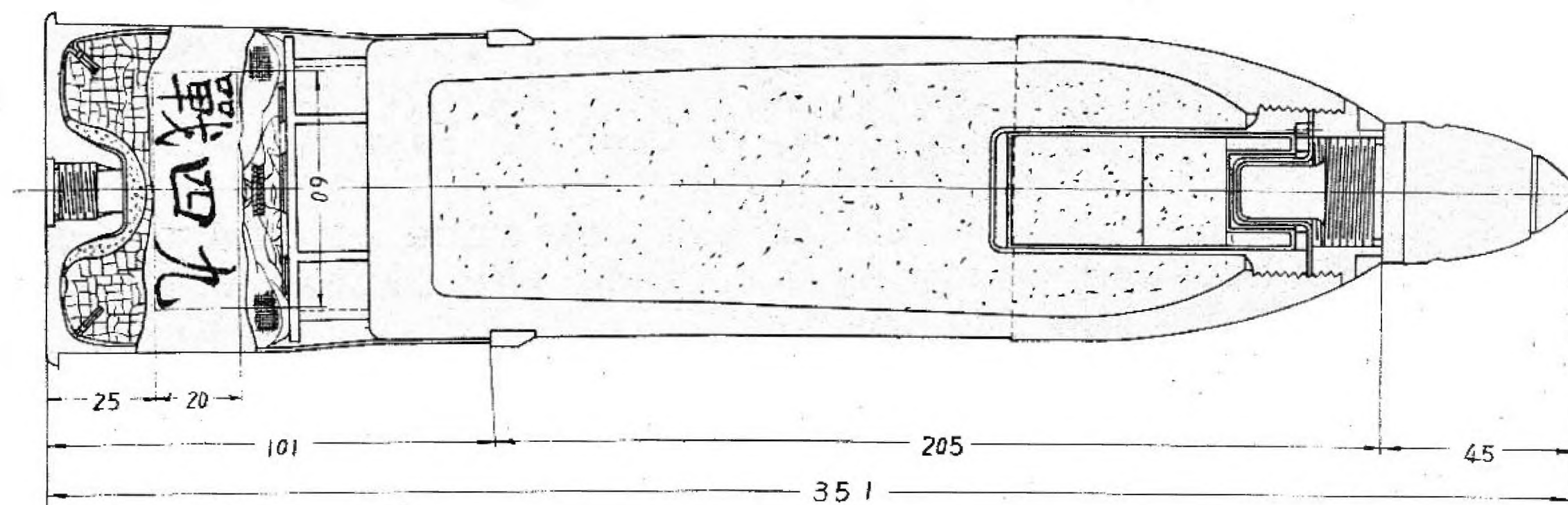
*Projectile Weight:* 3.81 kg

*Weight and Type of Filling:* TNT (poured) - 590 gm

*Fuzing:* Type 88 Short Delay (Gun)

*Guns Used In:* Type 94 7 cm Tank Gun

*Remarks:* Class A 40 gm booster tube  
Mk. 1 SHŌTOYAKU (pressed) and Mk. 2 SHŌTOYAKU  
(poured) may be substituted for the TNT. In this event,  
the 40 gm SHŌUYAKU booster tube is used.



*Diameter:* 75 mm

*Designation:* Type 94 HE Projectile

*Color and Markings:* White band below the bourrelet

*Projectile Length:* 302.5 mm

*Projectile Length With Fuze:* 359.3 mm

*Projectile Weight:* 6.020 kg

*Weight and Type of Filling:* TNT (poured) - 810 gm

*Fuzing:* Type 88 Instantaneous (Gun)  
Type 88 Short Delay (Gun)

*Guns Used In:* Type 38 Field Gun  
Improved Type 38 Field Gun  
Type 41 Cavalry Gun  
Type 41 Mtn. Gun  
Type 88 7 cm Mobile AA Gun (Special)  
Type 90 Field Gun  
Type 94 Mtn. Gun  
Type 95 Field Gun  
11th Year Type Mobile AA Gun  
31st Year Type Rapid Fire Mtn. Gun

*Remarks:* Substitute fillers: Mk. 1 SHŌTOYAKU (pressed),  
Mk. 2 SHŌTOYAKU (poured), HEINEIYAKU (poured), or a  
combination of 710 gm of ANGAYAKU and 100 gm of TNT.

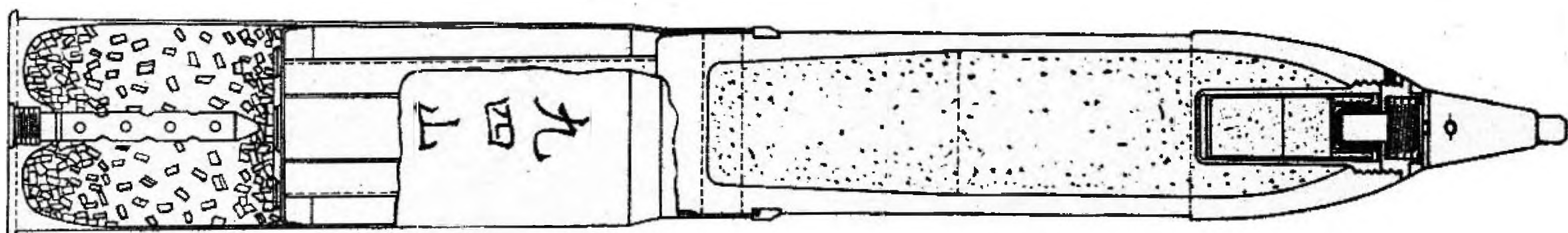
Either Type 96 5 gm primer of Type 40 car-  
tridge case primer may be used.

Either Type A 40 gm booster tube or the 40 gm  
SHŌUYAKU booster tube may be used, the latter when  
HEINEIYAKU is the filler.

Effective radius - approx. 20 meters

When a steel case is used the shell becomes  
Equipment Class - 3

When ANGAYAKU is used the characters for it  
appear on the projectile in white.



(TN: TYPE 96 5 GM PRIMER IS SHOWN)



*Diameter:* 75 mm

*Designation:* Type 97 Improved HE Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 3.600 kg

*Weight and Type of Filling:* TNT

*Fuzing:* Type 88 Instantaneous (Howitzer-Mortar)  
Type 88 Short Delay (Howitzer-Mortar)

*Guns Used In:* 31st Year Type Rapid Fire Mtn. Gun

*Remarks:* The gun type fuze is also given for this gun.

*Diameter:* 75 mm

*Designation:* Type 98 HE Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

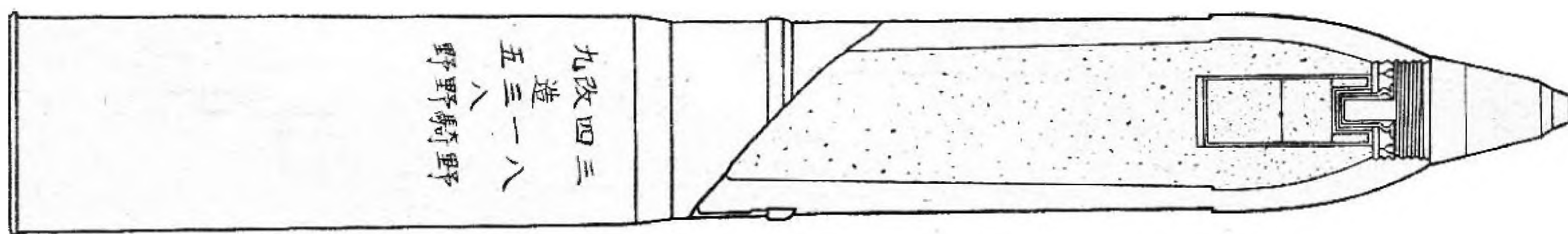
*Projectile Weight:* 6.040 kg

*Weight and Type of Filling:* TNT - 940 gm

*Fuzing:* Type 98 Instantaneous-Short Delay (Gun)  
Type 92 Instantaneous-Short Delay (Gun)

*Guns Used In:* Type 38 Field Gun  
Improved Type 38 Field Gun  
Type 41 Cavalry Gun  
Type 41 Mtn. Gun  
Type 88 7 cm Mobile AA Gun (Special)  
Type 90 Field Gun  
Type 94 Mtn. Gun  
Type 95 Field Gun  
11th Year Type Mobile AA Gun

*Remarks:* The weight of the TNT filler is also given as 840 gm  
HEINEIYAKU (poured) may be substituted for the TNT (poured)



*Diameter:* 75 mm

*Designation:* Type 98 Improved HE Projectile

*Color and Markings:* White nose, (九八改榴) (vertically) in white opposite the weight symbol.

*Projectile Length:* 278.4 mm

*Projectile Length With Fuze:* 335.2 mm

*Projectile Weight:* 4.550 kg

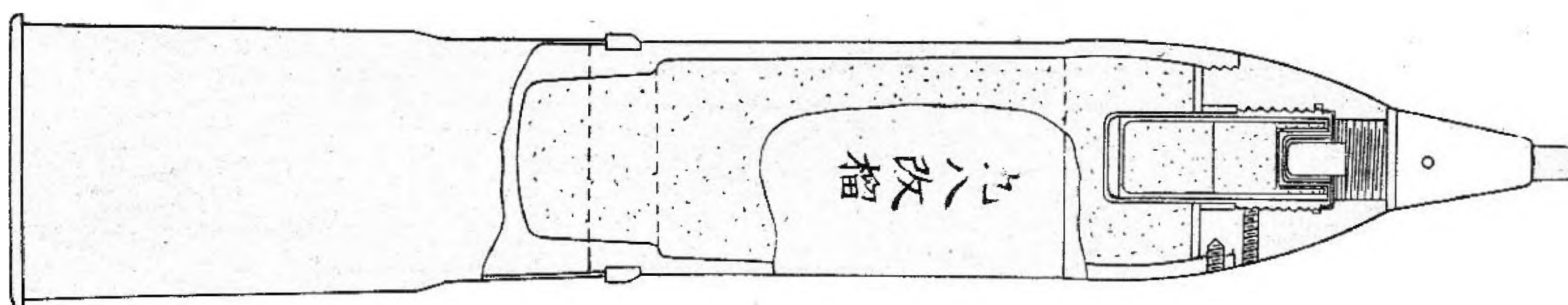
*Weight and Type of Filling:* TNT - 940 gm

*Fuzing:* Type 88 Instantaneous (Gun)  
Type 88 Short Delay (Gun)  
Type 88 Instantaneous-Short Delay (Howitzer-Mortar)

*Guns Used In:* Type 38 Field Gun  
Improved Type 38 Field Gun  
Type 41 Cavalry Gun  
Type 41 Mtn. Gun  
Type 95 Field Gun  
31st Year Type Rapid Fire Mtn. Gun

*Remarks:* The Type 88 Instantaneous-Short Delay (Howitzer-Mortar) fuze is given only for the 31st Year Type Rapid Fire Mtn. Gun.

The rotating band and the projectile body are the same as used for the Type 38 Shrapnel projectile.



Diameter: 75 mm

Designation: 10th Year Type HE Projectile

Color and Markings:

Projectile Length:

Projectile Length With Fuze: 359.3 mm

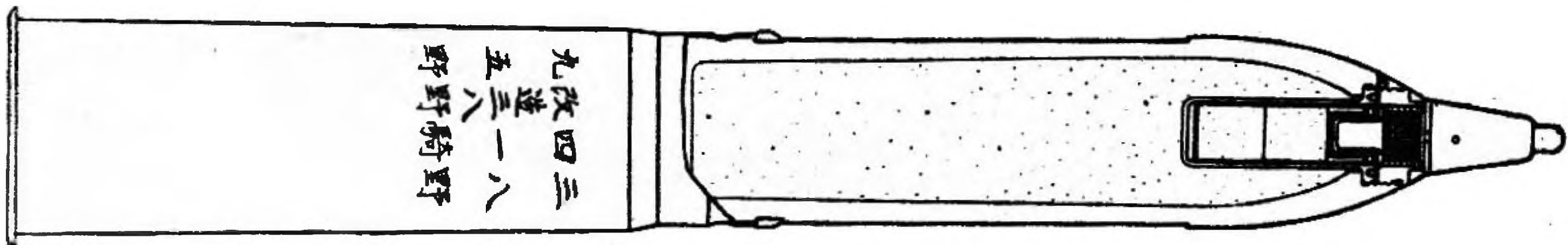
Projectile Weight: 5.60 kg

Weight and Type of Filling: TNT - 930 gm

Fuzing: Type 88 Instantaneous (Gun)  
Type 88 Short Delay (Gun)

Guns Used In: Type 38 Field Gun	Type 41 Cavalry Gun
Improved Type 38 Field Gun	Type 41 Mtn. Gun
31st Year Type Rapid Fire Mtn. Gun	Type 95 Field Gun

Remarks: Mk. 1 SHOTOYAKU (pressed) and Mk. 2  
SHOTOYAKU (poured) may be substituted for the TNT.  
No new ones will be manufactured.



*Diameter:* 75 mm

*Designation:* 12th Year Type HE Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:* 362.3 mm

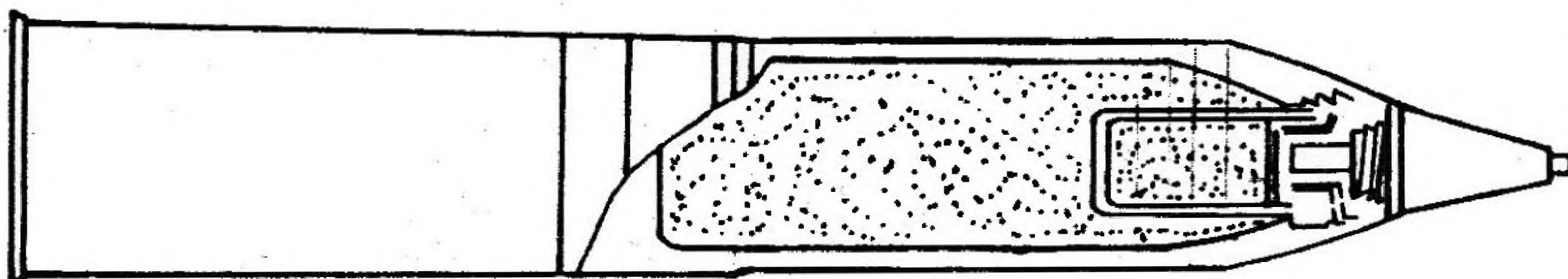
*Projectile Weight:* 3.79 kg

*Weight and Type of Filling:* TNT

*Fuzing:* Type 88 Instantaneous (Howitzer-Mortar)  
Type 88 Short Delay (Howitzer-Mortar)

*Guns Used In:*

*Remarks:* Effective Radius - approx. 20 meters  
Class A 40 gm booster tube



*Diameter:* 75 mm

*Designation:* Type 1 Time HE Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 6.70 kg

*Weight and Type of Filling:* TNT - 640 gm

*Fuzing:* Type 1 Time (Gun)

*Guns Used In:*

Type 38 Field Gun

Improved Type 38 Field Gun

Type 41 Cavalry Gun

Type 41 Mtn. Gun

Type 95 Field Gun

*Remarks:*



*Diameter:* 75 mm

*Designation:* Type 90 Semi-steel HE Projectile

*Color and Markings:*

*Projectile Length:* 291.5 mm

*Projectile Length With Fuze:* 348.3 mm

*Projectile Weight:* 6.18 kg

*Weight and Type of Filling:* TNT (poured) - 570 gm

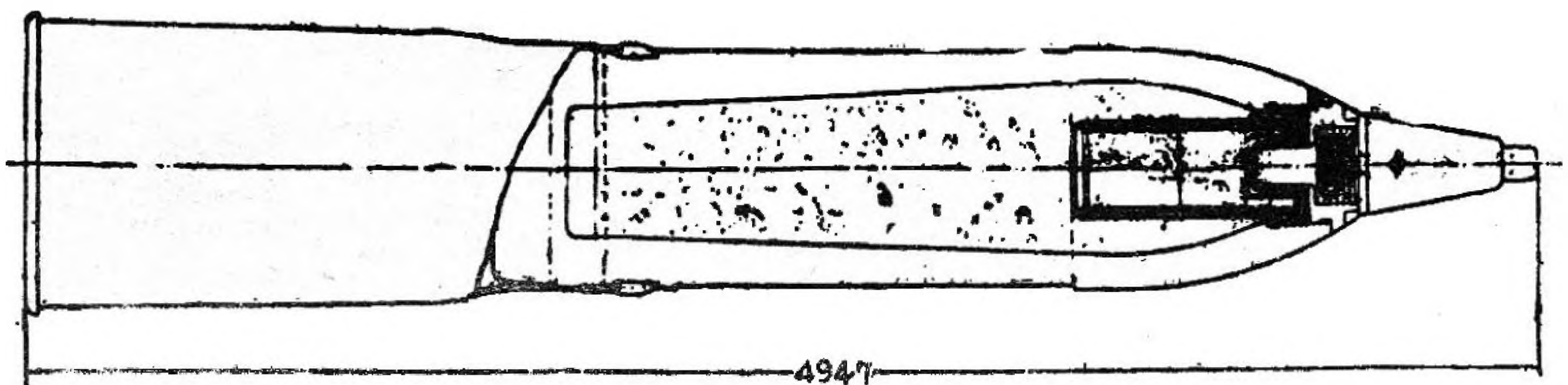
*Fuzing:* Type 88 Instantaneous (Gun)  
Type 88 Short Delay (Gun)

*Guns Used In:* Type 38 Field Gun  
Improved Type 38 Field Gun  
Type 41 Cavalry Gun  
Type 41 Mtn. Gun  
Type 90 Field Gun  
Type 94 Mtn. Gun  
Type 95 Field Gun

*Remarks:* SHOTOYAKU (pressed) may be substituted for the TNT (poured)

Class A 40 gm booster tube

Effective Radius - approx. 25 meters



*Diameter:* 75 mm

*Designation:* Type 97 Semi-steel HE Projectile

*Color and Markings:*

*Projectile Length:* 270 mm

*Projectile Length With Fuze:* 326.8 mm

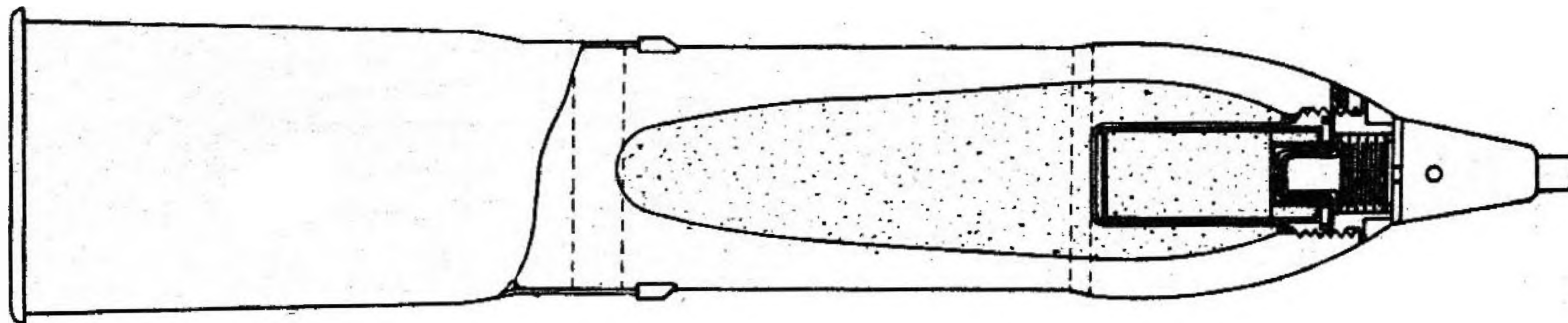
*Projectile Weight:* 6.010 kg

*Weight and Type of Filling:* TNT - 420 gm

*Fuzing:* Type 88 Instantaneous (Gun)  
Type 88 Short Delay (Gun)

*Guns Used In:* Type 38 Field Gun  
Improved Type 38 Field Gun  
Type 41 Cavalry Gun  
Type 41 Mtn. Gun  
Type 90 Field Gun  
Type 94 Mtn. Gun  
Type 95 Field Gun

*Remarks:* HEINEIYAKU (poured) may be substituted for the TNT (poured). In this event the 40 gm SHOUYAKU booster tube is used. Otherwise the Class A 40 gm booster tube is used.



*Diameter:* 75 mm

*Designation:* 10th Year Type Semi-steel HE Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

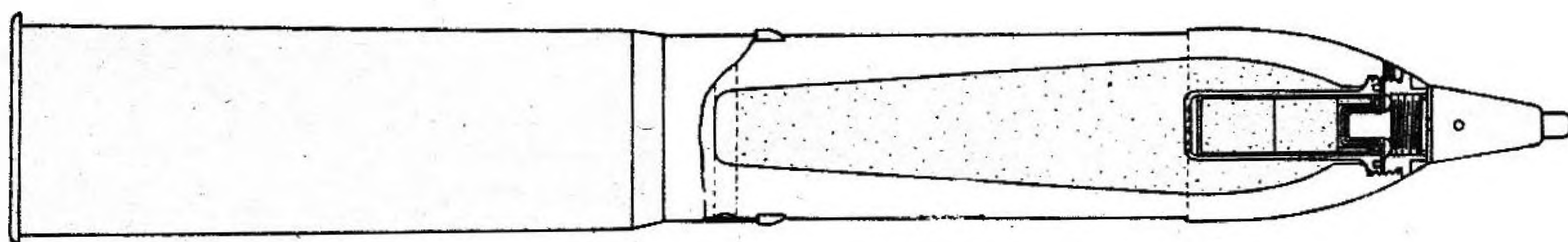
*Projectile Weight:* 6.550 kg

*Weight and Type of Filling:* TNT - 460 gm

*Fuzing:* Type 88 Instantaneous (Gun)  
Type 88 Short Delay (Gun)

<i>Guns Used In:</i> Type 38 Field Gun	Type 41 Cavalry Gun
Improved Type 38 Field Gun	Type 95 Field Gun
	Type 41 Mtn. Gun

*Remarks:* Mk. 1 SHŌTOYAKU (pressed) and Mk. 2 SHŌTOYAKU (poured) may be substituted for the TNT (poured).  
Effective Radius - 25 meters  
Picric acid booster.



*Diameter:* 75 mm

*Designation:* 11th Year Type Semi-steel HE Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:* Type 88 Instantaneous (Gun)  
Type 88 Short Delay (Gun)

<i>Guns Used In:</i> Type 38 Field Gun	Type 41 Cavalry Gun
Improved Type 38 Field Gun	Type 95 Field Gun

*Remarks:*

*Diameter:* 75 mm

*Designation:* Type 2 Hollow Charge Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

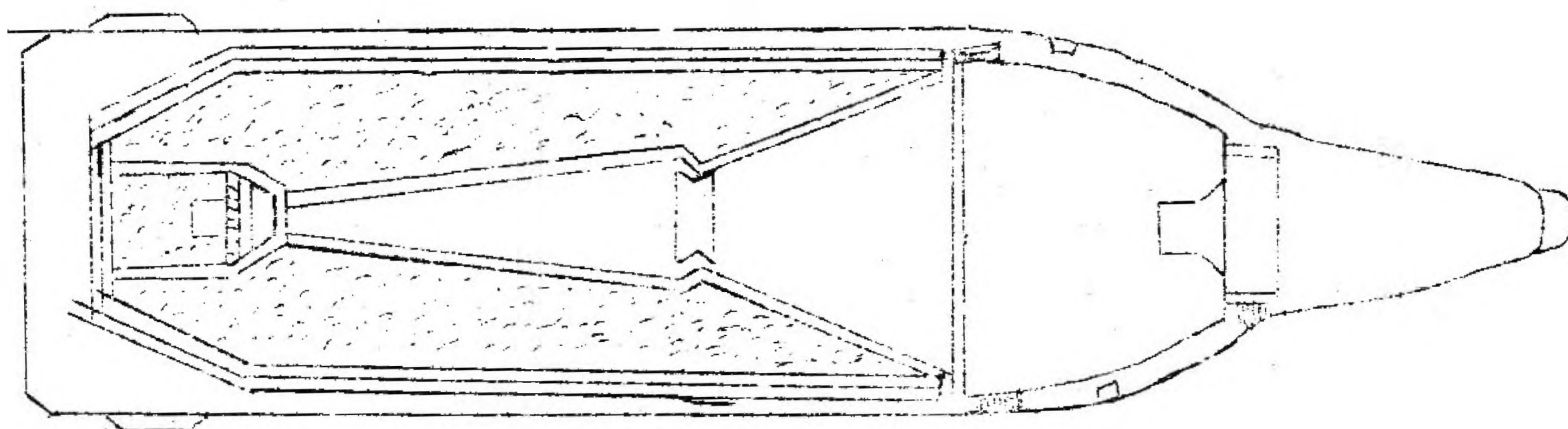
*Projectile Weight:* 3.740 kg

*Weight and Type of Filling:* CHAUYAKU - 600 gm

*Fuzing:* Type 88 Instantaneous

*Guns Used In:* Type 41 Mtn. Gun

*Remarks:*



*Diameter:* 75 mm

*Designation:* Type 87 Semi-steel Long-pointed  
Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:* 6.500 kg

*Weight and Type of Filling:* TNT - 465 gm

*Fuzing:* Type 88 Instantaneous (Gun)  
Type 88 Short Delay (Gun)

*Guns Used In:* Type 38 Field Gun      Type 41 Cavalry Gun  
Improved Type 38 Field Gun      Type 95 Field Gun

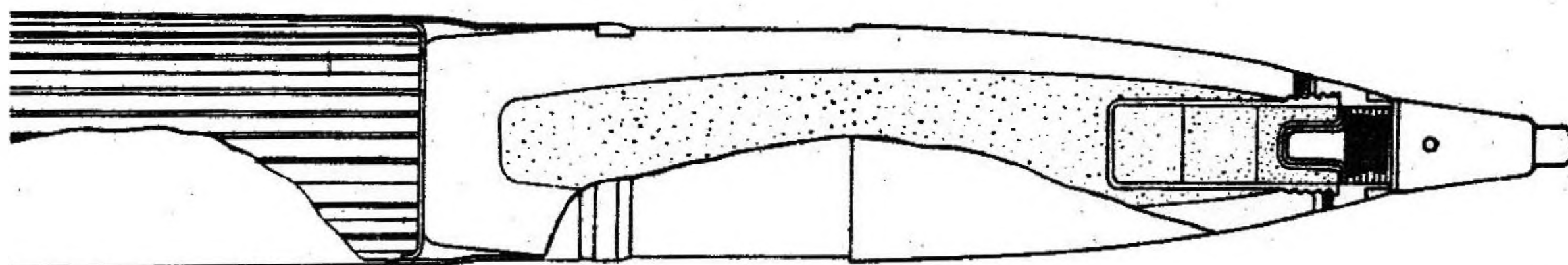
*Remarks:* Mk. 1 SHŌTOYAKU (pressed) and Mk. 2 SHŌTOYAKU  
(poured) may be substituted for the TNT (poured).

Requires a projectile plug

Class A 40 gm booster tube

Effective Radius - 25 meters

One source states this projectile is used only  
in the Improved Type 38 Field Gun





*Diameter:* 75 mm

*Designation:* Type 89 Semi-steel Long-pointed  
Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

*Projectile Weight:*

*Weight and Type of Filling:*

*Fuzing:* Type 88 Instantaneous (Gun)  
Type 88 Short Delay (Gun)

*Guns Used In:* Type 38 Field Gun  
Type 41 Cavalry Gun

*Remarks:*

*Diameter:* 75 mm

*Designation:* AA-HE Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

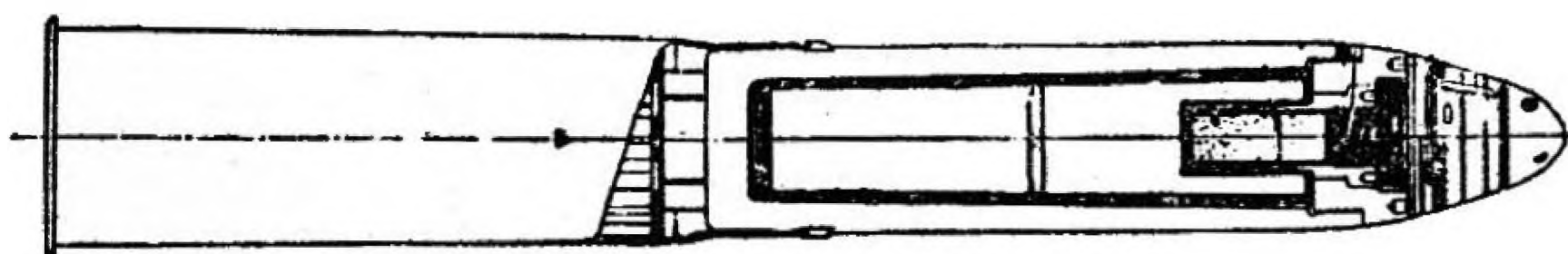
*Projectile Weight:* 6.60 kg

*Weight and Type of Filling:* ŌNAYAKU

*Fuzing:* 10th Year Type AA Time

*Guns Used In:* 11th Year Type Mobile AA Gun

*Remarks:* 10th Year Type Mercury fulminate plug  
27 gm booster tube



*Diameter:* 75 mm

*Designation:* Type 90 Long-pointed AA Projectile

*Color and Markings:*

*Projectile Length:*

*Projectile Length With Fuze:*

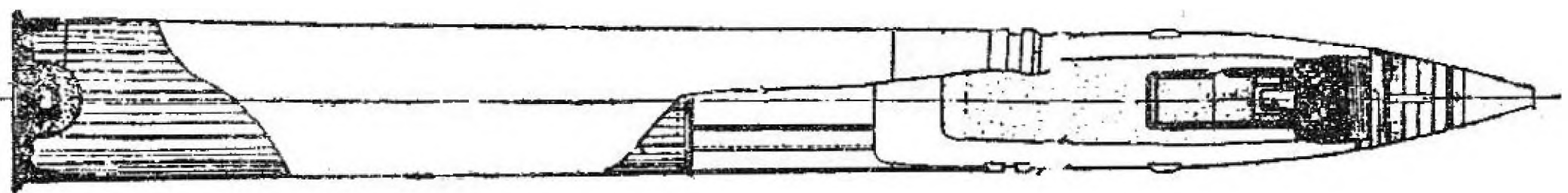
*Projectile Weight:* 6.530 kg

*Weight and Type of Filling:* TNT (poured) - 385 gm

*Fuzing:* Type 89 Long-pointed AA

*Guns Used In:* Type 88 7 cm Mobile AA Gun  
Type 88 7 cm Mobile AA Gun (Special)  
11th Year Type Mobile AA Gun

*Remarks:* Picric acid may be substituted for the TNT  
The total weight is also given as 6.370 kg. Equip-  
ment Class - 1. Class A 40 gm booster tube. Effec-  
tive radius - 20 meters.



*Diameter:* 75 mm

*Designation:* Type 90 Long-pointed Projectile

*Color and Markings:*

*Projectile Length:* 318 mm

*Projectile Length With Fuze:* 374.8 mm

*Projectile Weight:* 6.340 kg

*Weight and Type of Filling:* TNT - 540 gm

*Fuzing:* Type 88 Instantaneous (Gun)  
Type 88 Short Delay (Gun)  
Type 89 Long-pointed AA

*Guns Used In:* Type 38 Field Gun  
Improved Type 38 Field Gun  
Type 41 Cavalry Gun  
Type 41 Mtn. Gun  
Type 88 7 cm Mobile AA Gun (Special)  
Type 90 Field Gun  
Type 94 Mtn. Gun  
Type 95 Field Gun

*Remarks:* Mk. 1 SHŌTOYAKU (pressed), Mk. 2 SHŌTOYAKU (poured), and HEINEIYAKU (poured) may be substituted for the TNT (poured). When HEINEIYAKU is used the 40 gm SHŌUYAKU booster tube is used. Otherwise it takes the Class A 40 gm booster tube.

Cases taking the Type 40 cartridge case primer are no longer being manufactured.

When the projectile is used in the Type 88 7 cm Field AA Gun (Special) and Type 90 Field Gun, the rotating band is 24 mm

Effective Radius - approx. 20 meters

